INTERSTATE
OMMERCE COMMISSION
LIBRARY.
DEC 16 1898

Indexed.

MAR 11 1903

INTERSTATE
COMMERCE COMMISSION
LIBRARY.
DEC 16 1898

THE

# RAILROAD RECORD,

AND

Journal of Commerce, Banking, Manufactures and Statistics;

EDITED BY

E. D. MANSFIELD AND T. WRIGHTSON,

VOLUME XIII.

CINCINNATI:
Wrightson & Co., Printers and Publishers, 167 Walnut Street.
1865-6.

# INDEX TO VOLUME XIII.


Accidents..... 37, 71, 423, 434, 435, 448, 459, 460, 472, 484, 496, 508, 517, 519, 520, 529, 532, 545, 556, 568.
death by railway..... 589
how to prevent..... 506
on Foreign lines..... 480
report of Senate committee on... 37
statistics of..... 351
prevention of..... 73, 578
railway and their causes..... 360
Adirondac R. R..... 519, 616
Advance of the railroad to the Pacific, 206
Agassiz, Prof..... 446, 456
Agriculture, American..... 346
Ohio..... 106
influence of railroads on..... 142
of the United States..... 398
Agricultural machinery..... 107, 144
Air-line Railroad..... 432
Alabama & Tennessee Railroad..... 373
Albany bridge..... 370, 531
Iron and Machine Works..... 586
& Casyman's Railroad..... 466
& Susquehanna R. R. 206, 374, 519, 592
Alexandria to Rocky Fellows Gap.... 459
& Fredericksburg Railroad.. 460, 483
Allegheny Valley Railroad..... 33, 71, 62, 101, 124, 133. 162, 373, 616.
Alton & Mt. Carmel Railroad..... 123
America and the old continent..... 417
gold and silver mines in..... 239
American Agriculture and its condition..... 346
Bessemer Steel..... 399
Central Railroad..... 507, 602
desulphurizing Coal and Ore Co. 410
Express..... 459
Institute Fair..... 397
silk products..... 387
tariff and British manufactures.. 349
Ames's big gun..... 28
Ammonia Engine..... 109
Andrews, B..... 483
Another Central Line from Cincinnati to New York..... 465
important railway connection.... 531
railroad wanted..... 530
Antiquity of Petroleum..... 112
Archæology, engineering..... 214
Arctic exploration..... 158
Arizona..... 634
explorations in..... 98
murders in..... 105, 123
navigation of the Colorado..... 232
steamers in..... 292
territory of..... 75
Army officers on railroads..... 769
statistics..... 250
Arthur, W. R..... 569
Ashtabula & New Lisbon R.R..... 174
Assay office, U. S..... 197
Assignments and Grades..... 635
Association for the prevention of boiler explosion..... 87
Atchison & Pike's Peak Railroad.... 101, 239, 287, 471, 496, 508.
Athens & Saratoga Railroad..... 442
Atkins, H. C..... 385
Atlantic & Great Western R. R., 15, 18, 33, 71, 102, 190, 196, 227, 266, 274, 280, 358, 423, 459, 466, 478, 493, 496, 497, 506, 507, 508, 520, 531, 532, 533, 538, 545, 550, 555, 563, 565, 568, 587, 589, 604, 614, 616.
& New Jersey Railroad..... 617
& Mississippi Steamship Co..459, 569
telegraph..... 312, 430
Atlantic & Mississippi Steamship Line..... 639
Atoms, railway..... 578
Augusta & Macon Railroad..... 507
& Savannah Railroad..... 580, 616
Autographic telegraph..... 136
Automatic telegraph..... 580

Baggage check, new..... 526
liability for loss of.... 83, 84, 111, 135
Baker, J. E..... 483
Bald Eagle Valley Railroad..... 33
Baltimore, Cantonville & Ellicott's Mills Railroad..... 508
Baltimore & Liverp'l St'mship Line 502
& Ohio R R ... 81, 197, 412, 460, 490, 504, 505, 553, 557, 616.
extensions..... 423
war history of..... 277
Steamship Line..... 351
Bamboo paper..... 397
Bangor & Milford Railroad..... 228
Bank, liability of..... 122, 160
National American, N. Y..... 141
10th National, N. Y..... 114
Banking decision..... 340
Banks, debts and litigation in Ohio, 129
N. Y. statement..... 233
Barclay Coal Co..... 331
Bay of Fundy, railway to..... 315
de Noc & Green Bay State R.R... 472
& Marquette Railroad..... 495
State Railroad..... 505
Bear Creek Railroad..... 99, 137
Beauregard, Gen., appointed Sup't... 436
Bell, Thomas..... 520
Bellefontaine Railway line..... 62
& Delaware Railroad..... 553
& Indiana Railroad..... 566
Bellefonte & Snow Shoe Railroad..... 33
Belvidere & Delaware Railroad..... 40
Bessemer process..... 615
steel, American..... 399
Binks *v.* South Yorkshire Railway and River Dun Company..... 74
Black hills of Dakota..... 70
Blairsville, to Freeport, Railroad .... 373
Blast Furnaces, Elliptical..... 352
Blue Ridge, silver and copper in..... 412
Boats, canal and ferry, not taxable... 586
Boiler, experiments on the St John's, 503
explosions, association for the prevention of..... 87
wonderful..... 478
Boilers, Important improvement in.. 479
incrustation of..... 117
safety apparatus for..... 516
tubular, condemned..... 610
Bond case decided..... 566
Bonds, tax on, enjoined..... 447
Boston, Hartford & Erie Railroad.... 39
railroad dividends..... 542
to Puget Sound..... 483
& Worcester Railroad..... 363, 497
Bourbonnais Railway..... 78
Boyd, J. F..... 557
Boyle *v.* Philadelphia & Reading Railroad..... 95
Brake, new..... 219, 460
Brass, receipt for..... 616
Brazil, Agassiz in..... 456
oil in..... 292
Brazilian railroad..... 494
Brazos Railroad & Telegraph..... 458
Bridge, international near Buffalo... 399
Chey-air..... 59
at Dubuque..... 472
Cincinnati..... 388, 586
iron, over Connecticut river..... 458
Hudson river..... 370, 458, 490, 592
over Mississippi.. 26, 76, 496, 508, 557
over Ogechee..... 460
and tunnel at Pittsburg..... 409
Union Pacific Railroad..... 602
Bridges, cellular iron..... 255
over the Ohio..... 487
truss..... 574
Bridging the Mississippi..... 540
British cotton trade..... 387
manufactures..... 349
Railway Statistics..... 552
railways, mineral traffic on..... 555
Steam fire engine..... 193
system of Fortification..... 244
Broad guage in England..... 494
Bronze carriage..... 82
Brown, E. B..... 520
J. W..... 430
Buffalo & Allegheny Railroad..... 556
Bradford & Pittsburg R. R..... 33
& Erie Railroad..... 518
& Lake Huron Railroad..... 592
& Oil Creek Railroad..... 385, 458
& Washington Railroad..... 556
international bridge near..... 399
Buffalo, through freight from..... 459
Bullion, train of..... 61
Burlington Co. Railroad..... 40
& Mississippi Railroad..... 567, 592
to Ft. Madison..... 484
Butterfield's Stage line..... 459

Cairo & St. Louis R R..... 322, 350, 544
Calais & Baring Railroad..... 27
Calcutta, street cars for..... 530
Caldwell, D, W..... 190
California & Orogon Railroad..... 592
Idaho & Nevada..... 583
machine shops..... 77
mining..... 114
petroleum in..... 71, 244, 349
quicksilver mining Co..... 26
railroad, new..... 494, 507
railroads..... 517, 529, 557, 566
Camden & Atlantic Railroad..... 40
Camels and the Central Pacific R.R.. 517
Cameron Railroad..... 484, 592
Canada, canal project in..... 591
liabilities and resources of..... 256
Canadian railroads..... 256, 472, 495
Canal, largest..... 568
new..... 543, 592
project in Canada..... 591
Sturgeon Bay..... 530
tolls..... 374
Canals, tonnage on..... 142
Cannel coal, fields of, Elk River, West Va..... 363
Cannon, Ames'..... 28
English..... 134
Cape May & Millville Railroad..... 40
Capitols, railways from..... 124
Capital Railway..... 484
Car couple, new..... 592
for carrying oil..... 456
manufacturing..... 54, 71
wheels and axles, compensating..... 478, 515
Carolina railroads..... 460
Cariage of Freight by Railroad..... 81
Cartridges, Seguier's..... 238
Cars, iron passenger..... 161, 492
luxurious..... 472
Cast-steel, see Steel.
Catasauqua & Fogelsville R.R..... 33, 71
Catawissa Railroad report..... 33, 71, 124, 161, 459, 507, 508, 531, 532, 538, 555.
Cattle, water for..... 542
Caution to travellers..... 574
Cedar Rapids & Missouri Railroad ... 268
Cellular Iron Bridges..... 255
Central Argentiferous region of Nevada..... 231
Line, new..... 465
Ohio Railroad..... 77, 460, 553
Railroad and Banking Co. of Georgia..... 361
Railroad of Georgia..... 267, 280
Railroad of New Jersey..... 40, 59
Chadwick, Edwin, on Railway reform..... 207
Chalk, red, in Kansas..... 352
Chamber of Commerce, Cincinnati... 381, 526, 598.
Chapin, E. A..... 483
Chattanooga rolling mills..... 484, 568
Charleston Railroad..... 495
Chestnut Hill Railroad..... 33
Chester Valley Railroad..... 33
Chimney-air bridge..... 59
Chicago, population of..... 350
Railway Junction..... 445
stock yards..... 565
street railways..... 617
& Alton Railroad..... 100, 126
Burlington & Quincy R. R., 292, 448, 521.
& Great Eastern Railroad.... 544, 567
& Lake Superior Railroad..... 541
& Mobile Railroad..... 539
& Northwestern R. R., 76, 339, 459, 474, 491, 504, 531, 551, 616.
& Rock Island R. R., 209, 435, 472, 495, 545, 551, 592.
& St. Louis Railroad..... 617
Chili, railways in..... 351
Chillicothe & Brunswick Railroad... 126
China canal..... 568
steam in..... 472
Cincinnati and the Extension of the Central Kentucky Railroad..... 491
and her wants..... 189
and her railroad interests..... 502
Chamber of Commerce.. 381, 526, 598
coal and lumber roads of..... 574
gas in..... 589
gas consumed in..... 529
the beginning of a new era..... 226
proposed navy yard at..... 503
railroads needed by..... 601
street railroads..... 529
Suspension bridge..... 388
the first manufacturing city in the Union..... 612
to Knoxville..... 441, 442
to New York, new line..... 465
tunnel—what shall be done with it..... 333
Water works..... 601
& Chattanooga R. R..... 496, 567, 580
& Chicago Air-line R.R., 423, 446, 568
& Ft. Wayne Railroad..... 538
Hamilton & Dayton R. R., 155, 261, 508.
& Knoxville Railroad..... 502
& Mackinaw Railroad..... 107
Peru & Chicago Railroad..... 616
Railroad Progress and Improvement in..... 633
Southern R.R..... 513, 549, 598, 609
& Zanesville Railroad..... 57, 274
Cities and railroads..... 369
City Banks of New York..... 328
Clark's method of smoke prevention, 242
Clearing House, statement..... 233
Cleveland, commerce of..... 51
Columbus & Cincinnati R.R., 459, 567
& Erie Railroad..... 589
Ft. Wayne & Chicago Railroad... 493
& Mahoning Railroad..... 531
Painesville & Ashtabula Railroad, 33, 71, 580.
& Pittsburg Railroad..... 33, 576, 580
& Toledo Railroad..... 459, 496, 617
Clinton Line Extension Railroad..... 472
Coal fields of West Virginia..... 363
freights..... 436
and Lumber roads of Cincinnati, 574
in Colorado..... 112
in France..... 78
in Wisconsin..... 409
lands bill,..... 539
mined..... 435
production of..... 467
supply of Great Britain..... 286
theories, new..... 159
transported, 33, 461, 473, 485, 509, 521, 545, 593.
trade..... 160, 398
trade of Pittsburg..... 408
Carriage, bronze..... 82
uniform..... 530
Cold, trains stopped by..... 568
Colorado..... 565
coal in..... 112
fuel in..... 506
mining in..... 588
railways in..... 564
river..... 232, 266, 338
silver discoveries in..... 291
steamers on..... 292
& Clear Creek Railroad..... 470
Colored Feniaus..... 249
Columbia & Reading Railroad..... 205
Columbus & Indianapolis Railroad... 448
Commerce..... 99
of Cleveland..... 51
Commission's report on Flax Cotton 289
Committee on Pacific Railroad..... 532
Common carriers, liability of..... 148
sense on railroads..... 458
Compensating car wheels and axles, 478
Compressed air on Street cars..... 515
Compromise between the Atlantic & Great Western and Philadelphia & Reading Railroad..... 568
Comptoir mechanique..... 580

Condition and prospects of the Texas railroads ..... 577
Concord Railroad Frauds ..... 636
of the Treasury of Ohio ..... 372
Conductor indicted ..... 460
Conductors discharged ..... 568
dishonest ..... 616
fat, discharged ..... 556
incivility of ..... 480
Congress and Internal improvements ..... 518, 531, 533
and the mineral lands ..... 527
railway affairs in ..... 530
Congressional blunder ..... 563
Connecticut railroads, report ..... 233, 268
railroad project ..... 550
Connection with the Ohio river ..... 543
Connelsville Railroad ..... 310, 472
Conover, S. C ..... 557
Consolidation ..... 503, 508, 592
Construction, traction, retardation, safety and police of railroad trains ..... 169
of Blast Furnaces ..... 599
Consumption of Smoke ..... 238
Continent, new road across the ..... 374
Contractors, defaulting ..... 549, 564
Cook, Gen. Wm., death of ..... 136
Copper in Virginia ..... 412
Corner in Prairie du Chien ..... 489
Correction ..... 568
Correspondence ..... 466
Cost for grain transportation ..... 554
of working oil wells ..... 361
Cotton crop in the South ..... 518
East India ..... 531
gins ..... 2 2
in Mexico ..... 502
manufactories ..... 541
price of ..... 227
supply ..... 173
trade, British ..... 387
Country, progress of the ..... 69
Covington & Cincinnati Bridge ..... 536
& Ohio Railroad ..... 540 638
Credit mobilier ..... 419
system ..... 267
Crime and Disaster ..... 442
Cumberland Valley Railroad ..... 33
Curiosities in the Income Tax ..... 77
Currency, defaced ..... 376
fluctuations in the value of ..... 250
movements of ..... 561
Cutting Rates ..... 568

Dacotah ..... 552
black hills of ..... 70
Damages against Street R. R. ... 102, 123
by a city railroad ..... 564
Dayton & Cincinnati Short Line Railroad ..... 460
& Michigan Railroad ..... 155, 564
& Western Railroad ..... 545
Death by railway accidents ..... 589
of Gen. Wm. Cook ..... 136
of William Wrightson ..... 105
President Lincoln ..... 105
of Rev. Prest. Nott ..... 613
Debt, funded, and bonds ..... 409
of England ..... 89
of the United States ..... 477
national ..... 112, 113, 348
national, how to pay it ..... 166
when shall we pay the ..... 357
Decay of mater'ls in tropical climates 482
Decisions, see Railroad.
Decline in stocks ..... 614
Decorah Branch Railroad ..... 459
Defaulting contractors ..... 540
Delaware & Hudson Canal & R. R. 33, 71
Lack. & Western R.R ..... 33, 71, 580
Deposits, decision on ..... 340
Depot burned ..... 423
new ..... 532
large ..... 532
Des Moines Valley R. R ..... 459
Destination and distribution of American gold ..... 60
Detroit Convention ..... 268
Mackinaw and Superior railroads ..... 502
& Milwaukee Railroad ..... 497
railroad meeting ..... 508
street railways ..... 508
Diamond drills ..... 375
Diluted stocks ..... 591
Diminished earnings ..... 577
Direct railroad route of Cincinnati to the Southern seaports *via* Cumberland Gap ..... 513
Directors of Tenn. & Va. R.R ..... 541
Disputed Railway fares ..... 481
Dividends, Boston railroad ..... 542
returns of ..... 111
Diving extraordinary ..... 518
Domestic Commerce of the U. S ..... 40
Douglass rail-joint ..... 543
Drain of bullion ..... 61
Dubuque & Sioux City R.R., 52, 76, 373, 483, 508, 619, 616.
Dummies on the Hudson River R.R. 478
Dummy engines ..... 210
Dunkirk & Fredonia Railroad ..... 556
Duraud, John ..... 422, 442

Earnings, diminished ..... 577
increase of ..... 351
Alton & Terre Haute ..... 485
Atlantic & Gt. Western, 324, 431, 436, 473, 521.
Bellefontaine ..... 557
Burlington & Missouri ..... 72, 495
Cedar Rapids & Missouri ..... 78, 495
Chicago & Alton, 280, 388, 421, 424, 436, 473, 569, 581, 617.
Chic., Burl. & Quincy ..... 436, 472
Chic., Iowa & Nebraska ..... 78, 495
Chic. & R. Isl., 17, 53, 114, 198, 424, 436, 461, 485, 497, 509, 521, 533, 545, 557, 569, 581, 593.
Chic. & Milwaukee ..... 485
Chic. & Northwest'n, 76, 145, 197, 233, 424, 436, 473, 485, 497, 521, 533, 557, 569, 593.
Cleveland, Columbus & Cin'ti ..... 593
Cleveland & Pittsburg, 233, 266, 485, 509, 533, 569, 593.
Cleveland & Toledo ..... 448, 521
Connecticut River ..... 593
Dubuque & Sioux City ..... 78, 495
Dubuque & Southwest'n ..... 78, 495
Des Moines Valley ..... 78, 495
Detroit & Milwaukee, 436, 448, 461, 473, 485, 509, 533, 545, 557, 569, 617.
Erie, 76, 126, 197, 198, 372, 485, 533, 557, 593.
European & North American ..... 198
Flint & Père Marquette ..... 435
Grand Trunk, 15, 39, 197, 280, 424, 448, 473, 497, 529, 545, 569, 581.
Gt. Western, 424, 436, 459, 461, 497, 509, 521, 529, 533, 569, 581, 593.
Hartford & New Haven ..... 388
Housatonic ..... 28, 485, 545
Hudson River ..... 280
Illinois Central, 209, 424, 461, 521, 533, 569.
Indianapolis & Cincinnati, 387, 461, 617.
Jeffersonville ..... 521
Keokuk & Mt Pleasant ..... 78, 495
Little Miami ..... 50
London & Southwest'n ..... 472
McGregor Western .. 78, 314, 323, 495
Macon & Western ..... 448
Marietta & Cincinnati, 27, 114, 137, 256, 268, 424, 448, 461, 473, 485, 497, 521, 545, 569, 581, 593.
Michigan Central, 17, 114, 198, 376, 411, 424, 448, 461, 473, 485, 497, 521, 533, 545, 569, 581, 593.
Michigan Southern, 114, 424, 461, 473, 485, 569, 521, 533, 545, 557, 569, 581, 593.
Milwaukee & Prairie du Chien, 461, 473.
Mississippi & Missouri ..... 78, 495
Missouri Pacific ..... 533
New York Central ..197, 460, 529, 533
New Jersey ..... 593
Northern (Canada) ..... 569
North Pennsylvania ..... 367, 569
Norwich & Worcester ... 448, 533, 557
Ohio & Mississippi, 280, 460, 485, 533, 557.
Oil Creek ..... 617
Panama ..... 388
Pennsylvania ..... 26, 149, 162, 447
Phila. & Erie ..... 471, 569
Phila. & Reading ... 461, 485, 533, 581
Pittsburg, Ft. Wayne & Chicago, 436, 485, 509, 533, 545.
Racine & Mississippi, 18, 42, 71, 268, 304, 372, 424 448, 460, 473, 485, 509, 521, 533, 581, 593, 617.
Rome, Watertown & Ogdensburg, 424
Toledo, Wabash & Western, 17, 114, 448, 497.
Underground ..... 471
Western (Mass.) ..... 61, 581
Western Union ..... 617
Earth, internal heat of ..... 519
Eastern proposed routes ..... 432
Shore Railway ..... 150
East Brandywine & Waynesburg Railroad ..... 33
India cotton ..... 531
Mahanoy Railroad ..... 33
Pennsylvania Railroad ..... 33, 71, 541
of Prussia Railroad ..... 506
Tennessee & Virginia R.R ..... 460
Eaton & Hamilton Railroad ..... 470, 557
Ebensburg & Cresson Railroad ..... 33
Edgefield & Kentucky R.R ..... 495, 508
Egyptian Railways ..... 538
Electric, see Telegraph.
Electricity from waterfalls ..... 515
Electro-magnetic locomotive ..... 27
Elevated railroad ..... 579, 590, 615
Elevator, St. Louis ..... 447, 520
Elliptical blast furnaces ..... 352
Elmira & Williamsport R.R ..... 33, 71
Embree, Capt Davis ..... 117
Emigrants, statistics of ..... 50
German ..... 101
End of the Schuyler fraud ..... 604
Engine, an Ammonia ..... 109
English tank ..... 590
new ..... 589

Engineering archæology ..... 214
improvements in ..... 253
model ..... 208
narrative of wonders in Eastern Idaho and Southwest Dakotah, 552
Engineer's festival ..... 496
responsibility of ..... 370
scarcity of ..... 519
Engines, old English ..... 214
traction ..... 467
see Locomotives ..... 416
England, broad guage in ..... 494
ironworkers of ..... 82, 84
public debt of ..... 89
English cars ..... 495
express trains ..... 447
ordnance ..... 134
penny trains ..... 580
railway management ..... 519
railway receipts ..... 592
railway statistics ..... 543
Railways ..... 96, 132, 136, 493
railways, French locomotives on, 238
resident Secretary ..... 496
rolling stock ..... 589
stock companies ..... 598
tank engine ..... 590
treatment of iron for rails ..... 587
underground R.R., see London.
Visitors, our ..... 420
see British.
Erie Railroad ..... 33, 431, 551, 554, 580
& Niagara Railroad ..... 459
& North East Railroad ..... 33, 71
& Pittsburg Railroad ..... 33, 71
Errors in mechanics, and their result, 477
Europe, drain of bullion from ..... 61
steam communication with ..... 101
telegraphic routes to ..... 309
European railroad ..... 616
& N. A. R.R ..... 280, 339, 385, 400, 539
Evansville & Crawfordsville R.R ..... 516
Exchanging mails on the Railroad ... 359
Exhaustion of South Carolina ..... 382
Experiments on the St. John's boiler, 563
Explosive substance, new ..... 386, 615
Explosions, see Boiler ..... 87
Exports of Great Britain ..... 114
Express business, history of ....86, 97, 109
business south ..... 532
companies, receipts of ..... 276
Company decision ..... 122
loan to railroads ..... 532
train, speed of ..... 447
Extent of travel West ..... 50
Extraordinary vessel ..... 114

Fare, increase of, for high speed trains ..... 158
indicators ..... 580
street railway ..... 483
Fares, railway, disputed ..... 481
street railway doubled ..... 508
Farmer's Convention ..... 556
Fast time ..... 171, 190, 532
Fayette Co. Railroad ..... 33
Female detectives ..... 568
Fenian fund, how to use ..... 558
Ferry boat, new ..... 544
Finances and Currency of the U. S ... 357
New Jersey ..... 207
of the U. S., and movements of the currency ..... 561
Financial future of the South ..... 217
future, views of ..... 324
results of great railway lines ..... 405
Want ..... 419
Fine Testimonial ..... 516
Fink, Albert ..... 448
Fire ..... 567, 616
Engine, new British Steam .. ... 193
extinguisher, new ..... 553
Insurance losses ..... 564
responsibility of carriers for damage by ..... 219
Fires in the Oil regions ..... 338
Flax and seed ..... 383
cotton, Commiss'rs' report on .... 289
manufactures ..... 75
Flint & Pere Marquette R.R ..... 435
Florida railroads ..... 520, 540
Fluctuations and value of R.R. stock, 489
in the value of currency, and the relations of gold and silver ..... 250
Foreign commerce, review of ..... 273
lines, accidents on ..... 480
trade of the U. S ..... 172
Forfeited applications, renewal of ... 161
Forging ..... 113
Forsyth, Jacob ..... 497
Fortification, British system of ..... 244
Fort Scott Railroad ..... 483
France, coal in ..... 78
railways in ..... 376
Franklin and his gig ..... 554
Branch ..... 18, 33
Free trade ..... 516
Freehold & Jamesburg Agr. R. R. ... 40
Freeport to Butler ..... 580
Freeman, W. R ..... 616
Freight, accumulations of ..... 508
bills, large ..... 616
carriage of ..... 81
Convention ..... 556

Freight, low rates for ..... 423
rates ..... 436
shipments ..... 173
on street cars ..... 169
thieves ..... 460, 483, 484, 580, 592
way on railroads ..... 579
westward ..... 124
Freighting season for, between St. Louis and Boston ..... 520
French gas contracts and pipes ..... 603
inventions ..... 238
locomotives ..... 460
locomotives on English railways, 238
patents ..... 544
railways ..... 532, 564
railway, Giffard's injector on ..... 131
railway refreshments ..... 518
telegraph ..... 136
Frog, Mansfield's elastic ..... 615
Fuel in Colorado ..... 506
water as ..... 434
Funded debt and bonds ..... 409
Furnaces, blast ..... 599
Furnace, smoke-consuming ..... 517
Future freight of Western railroads, 255
railways in Colorado ..... 564

Gambling, stock ..... 370
Garratt, A. J ..... 616
Gas consumed ..... 529
Contracts and Pipes, French .... 603
in Cincinnati ..... 589
in India ..... 544
smelting iron with ..... 387, 447
Gedge, Wm. H ..... 497
Generous donation ..... 244
Genoa and New York steamship line, 239
Georgia Central Railroad, 195, 267, 280, 361, 459. 460, 508, 592.
Railroads ..... 405, 538, 556, 557
German cast-steel ..... 125
emigrants ..... 101
railways ..... 133, 470, 577
Gettysburg Railroad ..... 33
Giffard's injector ..... 131, 587
Gold, American destination and distribution of ..... 60
and silver mines ..... 239
harvest of ..... 280
its relation to paper currency, its exports and imports ..... 45
Lake Superior ..... 518
mines, Halifax ..... 412
shipments of ..... 316
shipment of ..... 554
Goshen & Springfield Railroad ..... 472
Government railroads, see Military.
Grades, locomotives for steep ..... 16
Grain crops and their relation to railroads ..... 297
transportation, cost of ..... 554
Grand Duplicate of Ohio ..... 39
Haven, naval depot at ..... 540
Rapids & Indiana Railroad, 64, 94, 151, 209, 255, 382
River Valley R.R ... 209, 315, 508, 592
Trunk Railway report, 147, 460, 472, 497, 531, 569, 592.
Gravity, railroad ..... 445
Gray, Geo. E ..... 556
Great Britain, coal supply of ..... 286
Britain, exports of ..... 114
Britain, see England.
Falls & S. Berwick R R ..... 435, 468
Northern Railroad (Eng.) ..... 496
Railroad suit ..... 420, 579
Trunk lines ..... 321
West, the ..... 433
Western Express (Eng.) ..... 447
Western Railroad, 196, 322, 446, 459, 472, 497.
Grounds given for depot ..... 508
Growth of the great cities of the West ..... 612
Guage, change of, in Missouri ..... 483
railway ..... 113
Gun, rules for handling ..... 88
Gwynn's Falls Railroad ..... 444

Hackensack & New York R.R ..... 40
Halifax, gold mines ..... 412
Hall, Capt. letter from ..... 410
W. H ..... 448
Hamilton & Dayton Railroad ..... 173
Hammer Creek Gap & Lancaster Railroad ..... 483
Hannibal & St. Jo. Railroad, 134, 507, 508, 532, 633.
Hanover Branch R.R ..... 33
Harbors, condition of ..... 539
Harcourt, Henry ..... 520
Hardening steel ..... 113
Harlem R.R ..... 423, 434, 448, 544
Harris, Clarendon ..... 497
Harrisburg, Portsmouth, Mt. Joy & Lancaster Railroad ..... 53
Hartford & New Haven R.R ..... 233
Harvest of Gold ..... 280
Hats, luminous ..... 371
Hays, J. D ..... 448
Hazleton Railroad ..... 33
Heat generators ..... 238
Hempfield Railroad ..... 33, 495
Henderson & Nashville Railroad ..... 636

Hicke steam engine ..... 385
High speed trains, increase of fare for ..... 158
Hietory and Review of Steamship linee ..... 130
Hogs in the U. S. ..... 310
Hoosac tunnel ..... 407, 508
Hopkius, G W., death of ..... 123
Horses, statistics of ..... 347
street car, relief for ..... 515
Houston, J. J. ..... 387
How to prevent railroad accidente.. 506
to resume specie paymeuts ..... 375
to use the Feniau fund ..... 538
Hoyt, Hon. James H ..... 241
Hudson & Tomah Railroad ..... 470
river bridge ..... 458, 490, 592
river railroad on west eide of, 458, 542
River Railroad ..... 233, 434, 544
River & Erie Railroad ..... 18
Hurd, Chas. H ..... 448, 520
Huntington & Broad Top R.R ..... 33, 71
Huron & Ontario Ship Canal ..... 468, 542
Hygrometers ..... 238

Idaho ..... 552, 563
Illinois, uew railroad in ..... 123
trade of Southern ..... 586
value of property ..... 114
Ceutral Railroad, 60, 118, 316, 459, 508, 563, 568, 569.
Southern Railroad ..... 472
Imperial Mexican Railway ..... 614
Important discovery ..... 117
explorationе in Arizona ..... 98
railroad case ..... 538
railroad euterprise ..... 430, 602
Imports ..... 249, 412, 486
Improvemente in engineering ..... 253
in railrond trucks ..... 459
Incivility of railroad conductors ..... 480
Increese of fare for high speed trains, 158
India. gas in ..... 544
railways in ..... 59, 85, 374, 435, 494
railway iron exported to ..... 532
Indian troublee ..... 459
Indiana railroad, new ..... 472, 483
Indianopolis & Cincinnati R. R., 508, 518 557, 589
Indiana & Illinois Railroad ..... 82
& Vincennes R.R ..... 544, 567, 592
Influence of railroads on agriculture, 142
Ingersol, G. A ..... 580
Injunction issued ..... 551
Insurance Companies in New York State ..... 326
decision ..... 148
defective ..... 514
reporte ..... 149, 150
Intercolonial Railway ..... 386
Interesting to R.R. corporatious ..... 351
Iuternal heat of the earth as a motive power ..... 519
improvemeuts in Congress, 518, 531, 539.
Revenue ..... 77
International bridge near Buffalo .... 399
Invention in R.R. carriage transit ... 602
Inventions, French ..... 238
valne of, to the poorer classes .... 345
Iowa Central Railroad ..... 208
Railroads, 78, 472, 481, 484, 495, 505, 556, 592.
Iron column in Richmond ..... 376
in the Northwest. ..... 325
new method of rolliug ..... 556
manufactures ..... 362, 375, 599
mountain, new ..... 543
passenger cars ..... 161, 492
rail ..... 587
Railway bridge in Counecticut ... 458
emelting with gas ..... 387, 447
trade ..... 516
condition of ..... 229
New Jersey ..... 516
sober word to the ..... 84
strikes in the. ..... 87, 376
transported ..... 33
welding by hydraulic pressure ... 556
workers of England ..... 82, 84
Ironton Railroad ..... 33, 71
Isthmus, uew railroad across ..... 592
Italy, population of ..... 65
Ithaca & Towanda Railroad ..... 556

Jackson, Lansing & Saginaw R.R ... 496, 520.
James river & Kenawha canal ..... 543
Jamestown & Franklin R.R ..... 33, 472, 496
Jersey City Locomotive Works ..... 457
Judea, railroad in ..... 557
Junction Railroad ..... 33

Kansas, red chalk in ..... 352
City & Cameron Railroad ..... 126
City & Fort Scott Railroad ..... 126
City & Leavenworth Railroad .... 532
Kean, D. H ..... 557
Kensington, old engiuee at ..... 214
Keutucky, her resources and how to develop them ..... 585
new railroad in ..... 434
petroleum in ..... 117, 446
statistics of ..... 173

Ky. Central Railroad, 459, 460, 491, 497, 517, 567, 616.
Keys to passenger cars ..... 495
Knapp, T. L ..... 483
Knoxville, railway to ..... 372
Krupp's Cast-steel Works ..... 125
steel tires ..... 494

Labor and capital ..... 125
question ..... 265
Lackawanna & Bloomsburg R.R ... 33, 71
La Crescent, Rochester & Yanktou Railroad ..... 616
La Crosse & Milwaukee R.R., 73, 174, 193, 385, 421, 517, 520, 544, 567, 588
Lake Border, emuggling on ..... 543
Shore Railroad ..... 459
Superior gold ..... 518
mineral wealth of ..... 51
Lancaster branch of the Columbia & Reading Railroad ..... 205
Land grants ..... 508, 616
sales ..... 532
Southern wild ..... 564
Landed property ..... 141
Late President of the Erie R.R. ..... 47
Law of the street ..... 603
Laws applying to travel ..... 84
Lawrence, J. J. ..... 616
Railroad ..... 448, 472, 508
Laying, J. D ..... 387
Lead discoveries in Missouri ..... 267
Leather, manufacture of ..... 384
Leavenworth & Ft. Gibson R.R ..... 382
Lawrence & Galveston R.R., 483 616
& Pawnee Railroad ..... 126
Lebanon & Pine Grove R.R ..... 373
Leesport & Moselem R.R ..... 221
Legal Tenders in circulation ..... 197
Lehigh Coal & Navigation Co ..... 436
& Lackawanna Railroad ..... 33
& Luzerne Railroad ..... 33
& Mahanoy Railroad ..... 33
& Susquehanna R.R ..... 33, 71, 539
Valley R.R., 33, 63, 71, 467, 496, 539, 580.
Let it be adopted ..... 518
Letters, lost ..... 383
Levecing the Mississippi ..... 422
Lewis, Enoch ..... 560
Lewisburg Centre & Spruce Creek Company ..... 507
Lexington & Big Sandy R.R ..... 496
& Frankfort Railroad .. ..... 495
Liability of Bank ..... 122, 160
of railroads, 73, 83, 111, 112, 395, 615
Liabilities and resources of Canada ... 256
Liberality ..... 480
License, railroad ..... 495
for railroad presidents ..... 509
Light railroad locomotives ..... 496
Lincoln, Abraham, death of ..... 105
Linseed oil and flax seed ..... 383
Liquid explosive compound ..... 615
Little Miami Railroad, 50, 225, 459, 514, 591, 605
Saw Mill Run Railroad ..... 33, 71
Schuylkill Nav. R.R. & Coal Co ... 33
Littletown Railroad ..... 33
Locomotive, competition for ..... 516
electro-magnetic ..... 27
engineers, responsibility of ..... 370
long stroke ..... 471
new ..... 591
reform ..... 57
taxes on ..... 472
French ..... 238, 460
light ..... 496
peat for ..... 112
road ..... 446
steel ..... 159
for steep gradee ..... 16
eee Engines.
London Pneumatic Despatch R.R., 88, 137, 364, 422, 471, 506, 610.
Long Island Railroad ..... 460
lines of railroad ..... 411
Look into the Future ..... 47
Look to your policies ..... 514
Lorberry Creek Railroad ..... 33
Los Augelee, oil in ..... 349
Louisville & Frankfort R.R ..... 495, 578
& Nashville Railroad, 430, 448, 483, 508, 519, 520, 557.
N. A. & Chicago R.R ..... 395, 592
Lowell, operatives in ..... 412
Lumber, seasouing ..... 397
Lumber trade of Saginaw ..... 640
Luminous hats ..... 371
Lykeue Valley & Coal Co. R.R ..... 33, 71

McCauley Mt. & Black Creek R. R ... 33
McConnellsville, new road from ..... 507
McCook, Gen. A. McD ..... 418
McDonald, James ..... 459
McGregor Western R. R ..... 435, 471
McLaue, Louis ..... 532
McMinnville & Manchester R.R ..... 495
Machinery, agricultural. ..... 144
Machinery, superiority of American, 567
Macon & Augusta Railroad ..... 508
& Brunswick Railroad ..... 406
& Western Railroad ..... 407
Madras Railway ..... 59

Mahnnoy & Broad Mt. Railroad ..... 33
Mahoning Railroad ..... 189
Mail, reduction of postage ..... 407
service ..... 70
Southern, resumed ..... 423
Maile on railroede ..... 539, 540
exchanging on the railroad ..... 359
lost ..... 383
transportation of the ..... 525
Maine, scarcity of railroads in ..... 580
Maintenance of railway rolling stock, 254
Manassas Gap Railroad ..... 460
Mansfield'e elnstic frog ..... 615
Manufactories, cotton ..... 541
Manufacture of agricultural implements in the U. S ..... 107
of Cast-steel ..... 125
of Leather ..... 384
of railroad iron ..... 841
of steel castings ..... 516
Manufactures, British ..... 349
Manufacturing and mining interests, 505
Marietta & Cincinnati R.R., 218, 422, 448, 483 532, 586, 616.
Mariposa Company ..... 418
Marquette to Chocolate ..... 483, 495
Marsh, Nathaniel ..... 47
Marshall v. Pa. R.R. Co ..... 16
Marshel B ..... 448
Marylaud railroads ..... 159, 491, 616
& Delaware Railroad ..... 579
Marysville, (Cal.) road from ..... 507
Massachnsetts, railway progress in, 90, 174.
Material progress of the Country ..... 93
Materials, decay of ..... 482
Mauritius Railways ..... 622
May, Capt. F D ..... 418
McHenry James, Letter from ..... 637
Mechanical conditions of R.R. working to prevent destructive wear and risk ..... 190, 202
Mechanics, errors in .. ..... 477
Meeting of R.R. Presidents ..... 435
Memphis, railroad connections of ..... 519
& Charleeton Railroad, 407, 411, 484, 497, 519.
Clarksville & Louieville R.R ..... 495
& Little Rock R.R ..... 519
& Ohio R.R ..... 483, 495, 519, 591
Metropolitan R.R. Co. bill, veto of ... 205
Underground Railway ..... 471, 592
Mexico and her condition ..... 100
and her mines ..... 239
cotton in ..... 502
governments in ..... 531
railroads in .... 448, 472, 507, 614, 615
Michigan ..... 579
Central Railroad .... 171, 299, 448, 569
South. & North Ind. R.R., 137, 145, 303, 496, 497, 592, 616.
railroads ..... 209, 315, 530, 532
Military railroads ..... 434, 435, 459, 495
Railroad system ..... 209
Mill Creek & Mine Hill R.R ..... 33
Milledgeville & Augusta R.R ..... 195
Millstone & New Brunswick R.R ..... 40
Millville & Glassboro Railroad ..... 40
Millwaukee & Minnesota R.R ..... 73
& Prairie du Chien R. R., 435, 436, 471, 507.
& St. Paul R.R., 73, 508, 544, 545, 616
& Watertown Railroad ..... 592
Mine Hill & Schuylkill Haven R.R., 33
Mineral industry of Spain ..... 363
Lands ..... 515, 527, 531
traffic on British railwaye ..... 555
wealth, our ..... 541
of Lake Superior ..... 51
of Pennsylvania ..... 232
of West Virginia ..... 229
Mines and mining, committee on, 539, 544.
Mining in Colorado ..... 588
interest ..... 417
revolution in ..... 230
statistice ..... 114
Minneapolis ..... 315
Minnesota railroads ..... 396, 435, 470, 471, 496.
Central Railroad ..... 470, 471, 484
Railroad ..... 495
Southern Railroad ..... 470
Valley Railroad ..... 470, 507
Minty, Gen ..... 448
Mississippi, bridge over, 26, 76, 496, 508, 540, 557.
leveeing the ..... 422
navy yard on ..... 540
shortening the ..... 519, 533
survey of the ..... 540
Central Railroad ..... 459, 497, 592
& Missouri Railroad, 208, 254, 312, 447, 472, 495, 545.
& Tennessee Railroad, 383, 411, 472, 483, 519, 550.
Mississippi & Missouri Railroad ..... 637
Valley Transportatiou Co ..... 592
& Wabash Railroad ..... 508, 519
Missouri, change of guage in ..... 483
lead in ..... 267
railroad fever ..... 589
railroads ..... 125, 467, 592
State debt of ..... 289

Missouri to the Pacific ..... 302
uniform gusge in ..... 446
River Railroad ..... 447
River, Ft Scott & Gulf R.R ..... 592
Valley Railroad ..... 126
Mobile & Ohio Railroad, 447, 459, 519, 532, 592.
Model engineering ..... 208
Monetary & Commercial, 17, 29, 40, 53, 64, 78, 90, 102, 114, 126, 150, 162, 174, 197, 209, 221, 232, 244, 268, 280, 292 304, 316, 328, 349, 352, 364, 376, 388, 400, 412, 424, 436, 448, 460, 473, 484, 497, 509, 520, 533, 545, 557, 569, 581, 593, 605.
Monster steam-hammer ..... 238
Montana ..... 578
mining region ..... 279
Mont Cenis, railroad over ..... 314, 563
Cenis, tunnel operations at, 133, 483
Montgomery & Eufaula Railroad ..... 407
& West Point Railroad ..... 373, 407
Moorhead, Wm G. ..... 557
Morris Canal & Banking Co R.R ..... 40
& Essex Railroad, 40, 448, 459, 494, 495, 496, 532, 555.
Mortgage, heavy tax on ..... 472, 495
Mortgage riot ..... 517, 520
Mount Carbon Railroad ..... 33
& Point Carbon Railroad ... 33
Diabolo Railroad ..... 560
Olympus ..... 541
Muir, James H ..... 520
W. K ..... 497, 520
Murders, railway ..... 237
Muscogee Railroad ..... 195

Najac v. Boston & Lowell Railroad ... 40
Nantucoke Railroad ..... 33
Narrow Gnage ..... 310
Nashville & N. W. Railroad ..... 430, 495
& Chattanooga R. R., 137, 442, 459, 496, 508, 532. 568.
& Decatur Railroad ..... 568
Nation's wealth in gold and silver ... 239
National Bank Notes, redemption of, 336
Bank System ..... 39, 327, 408
debt ..... 112, 143, 348
debt, how to pay it ..... 106
Railway ..... 580
Naval depot at Grand Haven .... ..... 530
Forces of U. S. ..... 22
Navigation of the Colorado, Arizona, 232
Navy yard at Cincinnati ..... 503
yard on the Mississippi ..... 540
Negro and his usee ..... 165, 249
Negroes, separate cars for ..... 472
Nesquehoning Railroad. ..... 33
Nevada ..... 25, 563
central argentiferous region of ... 241
silver mines ..... 63
New Almaden mines ..... 26
New and invaluable Railway baggage check ..... 526
California Railroad ..... 494
Castle & Beaver Valley R.R ... 33, 71
Castle & Franklin Railroad ..... 472
Coal theories ..... 159
England and the West, railroads between ..... 226
Generator ..... 479
Ind. & Cin. R.R. depot ..... 518
Iron mountain ..... 543
Jersey finances ..... 207
Jersey Iron trade ..... 516
Jersey railroads ..... 40
Jersey Railroad report, 26, 40, 208, 213, 508, 550, 580.
Jersey Central Railroad ..... 519
lines of railroad ..... 544
Lisbon Railroad ..... 373
method of rolling iron ..... 556
mode of extinguishing fires ..... 553
railroad arrangements ..... 569
railroad projecte .... 460, 493, 553, 565
railroad in Kentucky ..... 434
Railway shackle ..... 421
rails for Street railways ..... 613
road across the continent ..... 374
route of the Atlantic & Great Western Railroad ..... 493, 546
route from N. York to Montreal, 565
routee in New York ..... 556
safety apparatus for boilere ..... 516
through route ..... 550, 587
Orleans & Jackson Railroad ..... 205
New Eastern Outlets for the Pittsburg, Ft. Wayne & Chicago R'y 637
New Railway in Russia ..... 637
New York Banks, statement of ..... 233
Ceutral Railroad, 81, 197, 204, 310, 472, 491, 528, 529, 533.
& Erie Railroad ..... 81, 280
& Genoa steamship line ..... 239
& Harlem Railroad ..... 174
Insurance Companies, 49, 150, 326
its business and communications ..... 453
new line to ..... 465
to Montreal ..... 565
new routes in ..... 556
to St. Paul ..... 435
& Oswego Midland Railroad, 495, 531, 565, 604.

New York & New Haven Railroad, 241, 556, 604. 617.
Savings Banks of ... 3
Street railroads ... 516
underground railway ... 205, 555
& Washington Railroad ... 568
Newark & Bloomfield Railroad ... 40
Newman A. ... 617
Niagara Ship Canal ... 268, 590
North American & Italian Steamship Company ... 239
Branch Railroad ... 40
Carolina, pea-nut culture in ... 553
Lebanon Railroad ... 33, 373
Missouri & Cedar Rapids R. R., 52, 118, 126, 136, 194, 352, 376, 399, 508, 544, 545.
Northeastern Railroad ... 268
Northern Central Railroad, 33, 64, 71, 108, 412, 569.
Pennsylvania Railroad ... 33, 71
Northwest, iron in the ... 525
railroad progress in ... 285
Northwestern Railroad ... 432
Nott, death of President ... 613
Nottingham Henry ... 569
Nova Scotia gold mines ... 412
Railway ... 205
Nuisances of travel ... 327

O'Fallon, Col. John, death of ... 545
Ohio Banks ... 129
condition of the Treasury of ... 372
Grand duplicate of ... 39
& Lake Superior Railroad ... 562
law ... 90
& Mississippi Railroad, 38, 286, 545, 557.
& Lake Superior Railroad ... 639
& Mississippi R.R., and City of Cincinnati ... 639
oil in ... 339
real estate in ... 141
railroads ... 37
railroad connections ... 321
river, bridges over ... 489, 586
connection with ... 543
statistics of ... 10, 93, 106
Oil and the Government ... 457
car for carrying ... 456
City, railroads to ... 472
Creek Railroad ... 33, 616
fickle character of ... 478
in Brazil ... 292
in California ... 244, 349
in Kentucky ... 446
in Ohio ... 339
in Wisconsin ... 376
progress of ... 220
region, Pithole ... 303
region railroad ... 520
regions, fires in the ... 338
trade ... 457, 458
wells, cost of working ... 361
see Petroleum.
Olin, D. A. ... 508
Omaha & the Pacific Railroad ... 598
Omnibuses, drawn by locomotives ... 568
Operating expenses of Railroads ... 110
Orange & Alex. Railroad ... 484
Ordnance, English ... 134
Organization of Engineer corps of Atlantic & Gt. Western R.R ... 506
Originator of Cellular Iron Bridges ... 255
of Pacific Railroad ... 580
Oshkosh & Mississippi Railroad ... 603
Oswego, New York & Midland R.R., 592
Ottawa & Assiuaboin R.R. ... 370
Our English Visitors and American railroads ... 420
mineral wealth ... 541
Over Broadway ... 590
Overland freight business ... 569
Mail ... 532, 553
telegraph ... 466

Pacific Railroad, 9, 15, 21, 28, 77, 88, 94, 123, 126, 150, 165, 166, 173, 206, 243, 267, 297, 298, 302, 312, 323, 334, 382, 386, 394, 397, 411, 423, 431, 433, 435, 442, 444, 447, 454, 457, 472, 478, 479, 483, 484, 490, 494, 495, 496, 507, 508, 517. 519, 520, 521, 530, 531, 532, 533, 540, 541, 544, 545, 556, 557, 563, 566, 567, 573, 574, 580, 585, 586, 589, 592, 598, 601, 602, 610, 614, 615, 616.
Pacific Railroad from the West ... 494
Smoky Hill, route to the ... 399
Paducah & Vincennes Railroad ... 496
Pana & Springfield R.R. ... 471, 526
Panama Railroad ... 149
Paper, bamboo ... 397
zopissa ... 554
Parisian science ... 238
Passenger Railways of Philadelphia, 88
See Street railways.
Passengers, rights of ... 457
taxed ... 470
Passes, law against ... 616
Patent Well ... 577
Patents ... 161
French ... 544
Paterson & Ramapo Railroad ... 40
Pea-nut culture in North Carolina ... 553
Peat ... 591
beds, Wisconsin ... 112
for locomotives ... 112
Peninsula Branch R.R. ... 483, 495, 545
Pennsylvania Coal Co. ... 33
mineral wealth of ... 232
railroads ... 33, 221
Railroad, 26, 33, 34, 71, 81, 95, 136, 197, 213, 244, 423, 495, 519, 538, 544, 550, 555, 567, 580.
Steel Company ... 491
Penny trains ... 580
Perkiomen Railroad ... 519
Personal, 448, 497, 508, 520, 557, 592, 569, 580, 616.
Petroleum ... 11, 12, 95, 280, 514 638
and Petroleum Companies ... 227
antiquity of ... 112
as steam fuel ... 373, 409
in California ... 71
intelligence ... 135
Kentucky ... 117
Olive oil, Whalo oil, Lard oil ... 220
ten days' yield ... 375
see Oil.
Philadelphia & Balt. Central R.R. ... 33
& Erie Railroad, 33, 71, 102, 532, 538, 555, 616.
Germ. & Norristown R.R. ... 33, 71
& Reading R. R, 33, 51, 71, 73, 95, 290, 352, 541, 555, 568, 616.
Railroad law ... 137
railroads ... 640
Street railroads ... 88 616
& Trenton Railroad ... 33, 71
Wil. & Balt. Railroad ... 33, 71
Phillips, E. B. ... 363
Pilcher tunnel ... 483
Pistons without packing ... 482
Pit-hole Oil regions ... 303
Pittsburg, bridge and tunnel at, 409, 410
coal trade of ... 408
railroad to ... 531, 566
tonnage of ... 169
Columbus & Cincinnati R.R. ... 448
& Connelsville Railroad, 33, 71, 264, 495, 519, 531, 575.
& Erie Railroad ... 483, 531, 555, 616
Fort Wayne & Chicago R.R., 33, 71, 387, 521, 544, 545 638.
Maysville Railroad ... 507
& Steubenville Railroad ... 33, 137
Placerville Railroad ... 382
Plains, traction engines for the, 444, 467
traffic across the ... 567
Plans for resuming specie payments, 480
Platte Co. (Mo.) R.R., 126, 171, 566, 577
Pneumatic Despatch, London, 40, 252, 459, 506, 542, 610, 611.
see Underground.
Political economy ... 99
Population of Chicago ... 350
of Italy ... 65
Pt. Huron & Lake Michigan R.R. ... 315
& Owosso Railroad ... 315
Postage, reduction of ... 467
Post Office Department ... 525
Potter, J. H ... 592
Practical Railway Memoranda ... 156
Prairio du Chien R.R., corner in ... 469
in court ... 507
Present prospects of railroads ... 597
Presentation ... 422, 508, 516, 545, 557
Prevention of Fires ... 135
of Railway disasters ... 73, 578
Probable revolution in steam ... 28
Progress of the Country ... 69
of the Pacific Railroad ... 88, 478
of railroads in the Northwest ... 285
Proposed Navy yard at Cincinnati ... 503
Steamship line between N. York and Genoa ... 239
Prospects of Agriculture ... 106
Prussian operator sent to prison ... 435
railways ... 506
State Railway, sale of ... 209
Public Debt, statement of ... 347, 348
nuisance, what is ... 74

Quickest time on record ... 90
Quicksilver Mining Company ... 26

Race between steamships in the British Channel ... 422
Racine & Mississippi Railroad, 71, 459, 493, 541.
Rail-joint, Douglass ... 543
English iron ... 587
new, for street railways ... 613
Railroad accidents—cause & remedy, 517
bills before Congress ... 518
bridge burned at Greenwich, Ct., 423
bridge at Albany ... 637
car, new ... 266
center ... 397
consolidation ... 327, 434, 614
connection, new ... 352, 399
connection between Chicago and Cape Girardeau ... 60
connections at Memphis ... 519
damages ... 580
depot, new ... 518
R.R. decisions, 13, 15, 16, 24, 49, 73, 74, 83 84, 90, 95, 102, 111, 112, 135, 148, 160, 162, 172, 219, 220, 228, 263, 264, 288, 290, 300, 310, 337, 339, 395, 406, 419, 422, 431, 481, 492, 495, 507, 508, 519, 556, 564, 566, 580, 591, 615.
exchanging mails on the ... 359
express company ... 579
freights ... 590
for sale ... 592
from Blairsville to Freeport ... 373
from Cincinnati to Washington *via* Steubenville ... 429
from Freeport to Allegheny City, 124
from Peoria to Rock Island, ... 638
intelligence ... 26
interest ... 505
interests of a city ... 544
Improvements ... 639
iron, manufacture of ... 541
iron, sale of ... 456
Items ... 640
law in Philadelphia ... 137
management ... 220
material ... 459
meeting ... 567
new lines of ... 544
on west side of Hudson river, 458, 542
passengers, rights of ... 457
perplexities ... 517
presidents ... 569
project, new ... 350, 541, 553
Projects ... 639
Progress & improvement in Cincinnati ... 633
receipts, English ... 592
robbery ... 568
sale ... 435
seizure of a ... 566
stocks, fluctuations of ... 489
strike ... 592
to Pittsburg ... 531
to Washington ... 531, 540
train, runaway ... 555
trucks, improvement in ... 459
verdict ... 162
wanted ... 530
war ... 518
Railroads and agriculture ... 142
and cities ... 369
had condition of ... 26
between New England and the West ... 226
common sense on ... 458
freed from mail contracts ... 563
from Central West to South ... 201
in Iowa ... 505
in Maryland—Washington and the West ... 491
in Michigan ... 315
in South Carolina ... 363
in Tennessee ... 137
in United States ... 508
in the West ... 423
into Wyoming valley ... 539
liabilities of ... 73
mails on ... 540
of New Jersey ... 40
of Ohio ... 37
of the South ... 153
operating expenses of ... 110
present prospects of ... 597
relation of grain crops to ... 297
required in the United States ... 333
South, and bridges over the Ohio, 489
to the Pacific ... 490
Underground, see Pneumatic.
want of ... 517
which Cincinnati ought to have, 501
Railway accidents and their causes ... 360
affairs in Congress ... 530
baggage check, new ... 526
carriage transit ... 602
connection, new ... 531
consolidations ... 503
construction, progress of ... 532
corporations, interesting to ... 351
debts, new way to collect ... 616
disasters, prevention of ... 73
earnings ... 15
enterprise ... 551
fares, disputed ... 481
fines, Swiss ... 544
from St. Paul to St. Louis ... 280
guage ... 113
hints ... 613
in Italy ... 639
iron exported to India ... 532
mail routes ... 539
management ... 550
memoranda ... 156
murders ... 237
over Mont Cenis ... 314, 563
progress in Massachusetts ... 90, 174
progress in India ... 494
project new ... 565
reform, Chadwick on ... 207
rolling stock ... 254
safety ... 434
shackle, new ... 421
statistics, English ... 543, 552
to Bay of Fundy ... 315
to Knoxville ... 372
trains ... 109
Railway work for the season ... 469
working ... 190, 202
from Capitols ... 124
in Chili ... 551
in England ... 136
in France ... 376
in Germany ... 133
in India ... 85, 435
length of ... 459
rolling resistance on ... 411
Rain, what is an inch of ... 210
Ralcigh & Gaston Railroad ... 460
Raritan & Delaware Bay R.R. ... 40
Reading & Columbia Railroad ... 33, 71
& Pottsville Railroad ... 519
Receipts of Express Companies ... 276
Rector, Conrad ... 617
Redemption of National Bank Notes, 336
Reduction of postage to Norway and Sweden ... 467
Re-establishing the network of Southern railroads ... 110
Refreshments on trains ... 518
Relief for Street car horses ... 515
Renewal of forfeited applications ... 161
Reno Times ... 503
& Pithole Railroad, 446, 459, 532, 568, 616.
Responsibility of carriers for damage by fire ... 219
of Locomotive Engineers ... 370
Result of co-operation ... 125
Returns of dividends ... 111
Revenues, debts and resources ... 537
Review of Foreign Commerce, Customs and Balances ... 273
Revival of trade, and the productions of the West ... 370
Revolution in mining ... 230
Rice, R. N ... 497
Rich uncultivated domain ... 564
Richmond, iron column in ... 376
& Danville Railroad ... 264
Fredericksburg & Potomac R.R., 459
& Petersburg Railroad ... 407, 508
Ride in a Pneumatic railway tube ... 542
Right of eminent domain ... 15, 16
Righteous Verdict ... 374
Rights of railroad passengers ... 457
of railway Companies to make different tariffs ... 492
Riot ... 545
Rivals for the trade of the West ... 360
Road locomotives ... 446
Robb, James ... 497
Robbery, railroad ... 519
Rockwell, Edward ... 580
Rocky Fellows Gap ... 459
Hill Railroad ... 40
Rolling mill, Chattanooga ... 484, 568
resistance on railways ... 411
stock, English ... 589
stock, sale of ... 433, 435
Rome (Ga.) Railroad ... 407
& Jacksonville Railroad ... 407
Rondout & Oswego Railroad ... 580
Runaway railroad train ... 555
Russian cars ... 472
railroads ... 231, 484, 603, 616
telegraph expedition ... 372, 458

Sacramento Valley R R. purchase ... 411
Safety apparatus for boilers ... 516
St. Anthony, Minneapolis ... 315
St. John, railroad to ... 562
St. John's boiler ... 503
St. Louis elevator ... 447, 520
railroad liability of ... 508
prosperity of ... 76
street railways ... 617
Alton & Rock Island R.R. ... 495
& Cairo Railroad ... 350
& Iron Mountain R.R. ... 76, 99, 481
Jacksonville & Chicago R.R., 496, 579
& St. Paul Railroad ... 314
& Santa Fe Railroad ... 579
Vandalia & Terre Haute R.R. ... 508
St. Paul to St. Louis ... 280, 434
& Pacific Railroad ... 396, 470
& Superior Railroad ... 470
& Winona Railroad ... 470, 496
St. Petersburg & Moscow R. R. ... 231, 484
Salem Railroad ... 40
Sale of railroad iron ... 456
of rolling stock ... 495
of the Central Ohio Railroad ... 77
of the Prussian State Railway ... 209
of the Sandusky, Dayton & Cincinnati R. R ... 507
Sandusky, Daytou & Cincinnati R.R. 393, 507, 592.
Mansfield & Nowark Railroad ... 590
San Francisco in 1890 ... 291
& Washoe Railroad ... 61
Saratoga & Hudson River R.R. ... 638
Saturday's murders ... 237
Savannah, Griffin & N. Alabama Railroad ... 590
Savings Banks of New York ... 315
Schuyler fraud, end of ... 604
Schuylkill & Susquehanna R.R. ... 33, 71
Valley Navigation & R.R. ... 33
Seasoning lumber ... 397
Seeing through water ... 543

Seguier's cartridges ..... 238
Seizure of a railroad..... 566, 577
Selma & Meridian Railroad..... 373
& Tennessee Railroad ..... 407
Severe on railroad companies ..... 591
Sewage, utilization of..... 542
Shamokin Val. & Pottsville R.R., 33, 71
Shawmut & Ridgeway. Railroad ..... 33
Shinn, Wm. P..... 387
Ship Canal..... 468, 496, 540, 590, 592
Shipmente *via* New Orleans ..... 520
Shoemaking by teams ..... 553
Shortening the Mississippi river..... 533
Shortor railroad line to the West ..... 602
Shrinking on steel tyres..... 267
Silk products, American..... 387
Silver, copper and railways in Chili, 551
discovories in Colorado ..... 291
dividend in ..... 580
in Virginia..... 412
mines of Nevada ..... 63
Sleeping cars ..... 507, 580
Smelting iron with gas..... 387, 447
Smith, M. L..... 520
Smoke-consuming furnaces ..... 517
consumption of..... 238, 496
prevention, Clark's method of... 242
Smoky Hill route..... 399, 444, 459
Smuggling on the lake horder ..... 543
prevention of..... 527
Snow, obstructions by..... 544
Snowshoe Railroad..... 507
Sober word to the Iron trade ..... 84
Sonoma Valley Railroad..... 290
South, cotton crop in the ..... 518
financial future of the ..... 217
railroads to..... 201
Carolina, exhaustion of ..... 362
railroads in..... 363
Railroad..... 423, 508
Side Railroad ..... 544
Southern mail service resumed..... 423
Minnesota Railroad..... 50, 457, 580
Pennsylvania Railroad ..... 274
railroad movement..... 602
railroads, 153, 195, 237, 243, 406, 423, 459, 532.
railroads, re-establishing ..... 110
their reconstruction..... 228
railway restoration..... 540
short line R.R..... 433, 441, 442, 472
trade free ..... 237
wild lands..... 564
Southwestern Railroad..... 195, 540
Southern Central R.R., survey of.... 635
Spain, mineral industry of..... 363
Specie in the United States..... 239
movements..... 399
payments..... 206
how to resume..... 375
plans for resuming..... 480
Sprlngfield & Northwestern..... 374
Spiral railway..... 459
Stallard *v.* Great Western Railroad... 24
Stamp duties..... 29
State debt of Missouri ..... 289
Statement of the Public Debt..... 347
Statistics of Crime and Disaster..... 442
of Emigrants ..... 50
of Hogs in the United States..... 310
of Horses ..... 347
of Kentucky..... 173
of machinery..... 144
of Ohio. ..... 10
of Tobacco..... 322
of Wool ..... 360
Steam cars *vs.* Trains..... 134
communication with Europe..... 101
engine, Hicks..... 385
fire engine, new British..... 193
fuel, petroleum as ..... 373, 409
hammer, monster ..... 238
in streets..... 566
power on the Western Plains..... 444
Railroads of Massachusetts..... 640
revolution in ..... 28
superheating ..... 88
traction engines on the plains.... 467
whistle, powerful..... 544
Steamers in the mail service..... 70
on the Colorado..... 292
Steamship lines, history of ..... 130
Steamships between New York and Genoa ..... 239
race between ..... 422
Steel, American Bessemer ..... 399
Castings, manufacture of ..... 516
hardening..... 113
Krupp's..... 125, 494
locomotives ..... 159
Pens..... 603
rails ..... 615
tyres, shrinking on..... 267
worke, number of ..... 616
wrought ..... 602
Stereoecopes..... 238
Steubenville route..... 409, 410, 429
Stock companies, English ..... 598
gambling ..... 370
operations ..... 469
yards, Chicago..... 565
Stocks, decline in ..... 614
diluted ..... 591
Stockton & Copperopolis R.R..... 494
Street, law of the..... 603
car horses, relief for..... 515
compressed air on ..... 515
for Calcutta..... 530
*vs.* steam cars ..... 514
railway car and engine..... 301
Railroad, damages against, 102, 123, 565.
decision ..... 169
fare doubled ..... 508
fares ..... 483
in Mexico..... 507
liabilities of..... 615
license. ..... 495
new rails for..... 613
steam on ..... 566
Chicago..... 617
Cincinnati..... 529, 589
New York ..... 516, 568
Philadelphia ..... 88 616
St. Louis ..... 617
Strike in the Iron trade ..... 376
railroad..... 592
Striking oil in California ..... 244
Stroug hint to the Western (Mass.) Railway Managers..... 514
Sturgeon, the Hon. Isaac H..... 194
Bay Canal ..... 530
Summit tunnel..... 483
Superheating steam ..... 88
Survey of the Mississippi..... 540
Survey of the Southern Central R.R., 635
Sussex Railroad..... 40
Sweet, Brig. Gen..... 497
Swiss railway fines ..... 544
Switch-back Railroad..... 445
Switch, new..... 544
Switches, improvement wanted..... 484
Syracuse, N. Y., new road ..... 460

Tallow spring ..... 86
Tariff, American..... 349
for ten years..... 508
freight ..... 568
new..... 71
Tariffs, railway..... 492
Tax, heavy on mortgage ..... 472, 495
on bonds enjoined ..... 447
on oil..... 457
on passengers ..... 470
on engines. ..... 472
on knowledge..... 567
on railroads..... 505, 580
Tehuantepec Railroad ..... 592
Telegraph..... 493
Atlantic..... 227, 312, 430
autographic..... 136
automatic..... 580
charges ..... 456
companies..... 340
in Minnesota ..... 580
nverland..... 466
Russian ..... 372, 458, 493
Telegraphic routes to Europe ..... 309
Telegraphing, mode of..... 480
Ten days..... 375
Tennessee & Alahama R.R..... 568
railroads ..... 411
& Memphis R.R.. ..... 483
& Pacific Railroad..... 592
railroads..... 137, 483, 495, 580, 616
Tennessee & Virginia Railroad..... 541
Terre Haute & Alton R.R..... 549
Territory of Arizona..... 75
Texas railroads..... 577
Central Railroad..... 496
Texas railroads..... 638
Theine in the Kola nut ..... 34
Thievee, see Freight.
Thirty-seventh State..... 565
Thread, manufacture of..... 73
Three great telegraphic routes to Enrope ..... 309
Through routes, new..... 550, 587
Ticket Agents' Meeting... ..... 62
suit for loet..... 508
Tickets sold, at Hamilton ..... 484
Time, quickest on record..... 190
Tioga Railroad..... 33, 71
Tires, Krupp's steel..... 494
weldless..... 613
Titusville & Pithole Railroad..... 532
Tobacco, statistics of..... 322
Tobin, John F., resolutions..... 233
Toledo, Logansport & Burlington Railroad..... 544, 267
Peoria & Warsaw Railroad, 303, 508, 519, 569.
& S. W. Trunk Railroad..... 435
Wabash & Western Railroad, 196, 435, 459, 483, 569.
Tonnage on New York Central R R., 204
To railway companies and railway travelers ..... 613
Track, depredations on..... 544
negligence in crossing..... 519
Traction engines..... 467
Tracy, James J..... 532
Trade and Commerce of Cincinnati... 381
and railroads from the Central West to the South ..... 201
of Southern Illinois..... 586
Traffic across the Plaiue..... 567
Train, Geo. Francis ..... 541
Transportation of the mails..... 525
Travel, laws applying to..... 84
nuisances of..... 327
west, extent of ..... 50
Travelers' Club..... 214, 466
Treasury account, revenues, debts and resonrces of the country.... 537
Tredegar Iron Works..... 376
Trevortou Coal & Railroad..... 33
Trial of a new patent brake..... 219
Tribune Almanac for 1866 ..... 550
Trinmph of Pacific Railroad canse ... 15
Trucks, Railroad improvement in.... 459
Truss Bridgee..... 574
Tubular boilers condemned..... 610
Tuunel between Norway and Sweden, 616
Cincinnati..... 310, 333
Hoosac ..... 407, 508
Mont Cenis..... 483
operations at Mont Cenis,..... 183
Pilcher ..... 483
Summit ..... 483
Tyrone & Clearfield R.R..... 33, 137

Underground Railways in London, 88, 137, 364, 471, 555.
railroad in New York ....205, 555, 592
see Pneumatic despatch.
Uniform coinage..... 530
gnage in Missouri..... 446
United States, agricnlture of the..... 398
Assay office..... 197
debt of..... 357, 477
domestic commerce of ..... 40
estimated wealth of..... 50
foreign trade of..... 172
Military Railroads ..... 433, 435
mineral lands of the..... 515
Naval Forces..... 22
progress of..... 69
railroads in ..... 508
railroads required in..... 333
specie in..... 239
statistics of Hogs in ..... 310
Telegraph *v.* C., H. & D. R.R..... 16
Treasury receipts..... 197
Use of Water as fuel..... 434
Utica, Susquohanna & Chenango Valley Railroad..... 519, 580
Utilization of Sewage ..... 542
Valne of Inventions to the poorer classes..... 345
Various plans for a Ciucinnati Southern railroad ..... 549
Vera Cruz & Mexico Railroad..... 48
Verdict..... 454
Vermont Central Railroad..... 421
Vessel, extraordinary..... 114
Veto of the Bill of the Metropolitan Railroad Co. ..... 205
Viatricide..... 529
Vicksburg, Shreveport & Texas R.R. 495
View of the National Bank system... 39
Views of Financial future..... 324
Vincennes & Indiana Railroad..... 579
Virginia Central Railroad, 376, 460, 504
copper and silver in ..... 412

Walker John..... 616
Wallace, Wm..... 497
Want of railroads..... 517
War history of the Baltimore & Ohio Railroad ..... 277
Warren & Franklin R. R., 40, 519, 532
Warsaw (Ill.) Railroad to ..... 299
Washington railroads ..... 491
railroad to..... 531, 540, 589
Washoe ..... 267
Water as fuel ..... 434
for cattle on railroads ..... 542
seeing through ..... 543
Waterfalls, electricity from..... 515
Waterworks, Cincinnati..... 601
Way freight on railroads ..... 579
Wealth of different States..... 50
Wear of railways..... 190, 202
Webster, James R..... 545
Weights and measures..... 351
Welding iron by hydraulic pressure, 556
Weldless tires..... 613
Well, patent..... 577
West, productions of ..... 370
railroads in the..... 423
railroads between New England and..... 226
rivals for the trade of..... 369
Chester & Philadelphia R.R... 33, 71
Jersey Railroad..... 40
Pennsylvania Railroad..... 33
Virginia..... 326, 348
Cannel coal fields of..... 363
mineral wealth of..... 229
West *vs.* East side of the Hudson..... 639
Western Railroads..... 134
future freight of..... 255
(Mass.) Railroad.....514, 557
& Atlantic R.R..... 232, 406, 569
Central Railroad..... 555
Maryland Railroad ..... 459, 519
Westfield Railroad..... 532
What after Peace..... 46
What is an inch of rain ..... 210
What strikee lead to..... 87
White laborers preferred..... 496
White Mountains railroads..... 637
Whitehall Pneumatic Railway..... 252
Whitewater Canal suit..... 507
Valley Railroad..... 472, 483
Williams, Edward H..... 580
Louis ..... 508
Wilmington & Manchester R.R...276, 507
Winchester & Potomac R.R..... 592, 616
Winona & St. Paul Railroad ..... 385
& St. Peter Railroad..... 470, 580
Wisconsin, coal in..... 409
R. R. decision..... 13, 90
oil in ..... 376
peat beds..... 112
railroads ..... 492, 495, 545
Wonderful Boiler..... 478
Wool, statistics in ..... 360
Work and waste..... 566
Wrightson, Wm., death of...105, 123, 635
Wrightsville, York & Gettysburg Railroad ..... 33
Wrought steel..... 602
Wyoming Valley railroads..... 539

Young, Brigham..... 509
Yuba Railroad..... 557

Zanesville, new road from ..... 498
Zopissa paper ..... 554

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, - - { Editors

CINCINNATI:
THURSDAY, FEBRUARY 23, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | | |
|---|---|---|
| One square, single insertion | | $ 1 00 |
| " " | per month | 3 00 |
| " " | six months | 12 00 |
| " " | per annum | 20 00 |
| " column, single insertion | | 5 00 |
| " " | per month | 10 00 |
| " " | six months | 40 00 |
| " " | per annum | 80 00 |
| " page, single insertion | | 15 00 |
| " " | per month | 25 00 |
| " " | six months | 110 00 |
| " " | per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| *Little Miami—* | *Depart.* | *Arrive.* |
|---|---|---|
| Cincinnati Express | 6.00 A. M. | 7.30 P. M. |
| Mail | 9.00 A. M. | 8.15 A. M |
| Columbus Accommodation | 4 00 P. M. | 11.30 A. M. |
| Morrow Accommodation | 6.20 P. M. | 8.00 A. M. |
| Night Express | 10.00 P. M | 10.05 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky Mail | 7.00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7.00 A. M. | 9.45 P. M. |
| Cin. & Chicago Air Line Express | 7.00 A. M. | 9.45 P. M. |
| Dayton Accommodation | 2.30 P. M. | 5.45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5.00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7.00 P. M. | 12.35 P. M. |
| Hamilton Accommodation | 7.00 P. M | 8.05 A. M. |
| do do | 10.00 A. M. | 6.45 A. M. |
| *Marietta & Cincinnati—* | | |
| Mail Express | 7.40 A. M. | 7 00 P. M. |
| Chillicothe Accommodation | 3.30 P. M. | 11.30 A. M. |
| *Ohio & Mississippi—* | | |
| Louisville, St. Louis and Cairo Mail | 7.00 A. M. | 11 30 P M. |
| St. Louis and Cairo Express | 6.00 P. M. | 5.00 A. M. |
| Louisville, St. Louis and Cairo Express | 7 40 P. M. | 8.20 A. M. |
| *Indianapolis & Cincinnati—* | | |
| St. Louis and Chicago Express | 6.30 A. M. | 11.00 A. M. |
| Mail | 1.10 P. M. | 5.00 P. M. |
| Night Express | 4 00 P. M. | 1.40 A. M. |
| Lawrenceburg Accommodation | 4.25 P. M. | 8.35 A. M. |
| Harrison Accommodation | 9.00 A. M. | 3.00 P. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Morning Express | 9 00 A. M. | 7.30 P. M. |
| Accommodation | 4.00 P. M. | 8.05 A. M. |
| *Kentucky Central,—* (City time.) | | |
| First Train | 6.00 A. M. | 10.40 A. M. |
| Second Train | 2.00 P. M. | 6 00 P. M |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## CENTRAL PACIFIC RAILROAD CO.

STATEMENT MADE TO THE NEVADA LEGISLATURE.

Next to the completion of the great war on hand, (and that we believe will soon come to an end,) there is nothing more important to the American Nation than the completion of the great Pacific Railroad. Without it we are geographically two people, and it must be remembered that in our Pacific States will soon be a great nation. Nevada has grown even more rapidly than California, and all the States on that coast, must grow rapidly under the stimulus of their incalculable mineral resources; and almost quite as much under the stimulus of the re-opening Pacific trade. China and India, with the adjacent countries, contain more than six hundred millions of people—half the human race. They are not savages. On the contrary, they have the oldest civilization on earth. They have cultivated the earth with as much care as Europe has. They raise the very articles we most import,—silks, teas, coffee and rice. They need the very articles we produce—gold, silver, cotton manufactures of the finer kind, and all the finer fabrics. Heretofore, this region has been shut out from commerce; but now it is open to our commercial invasion and the profits we can make in that great trade. Under this double stimulus of immense mining resources and of a vast trade with Asia, the Pacific States must grow with surpassing rapidity even in this wonderful country; but half the advantage of this growth and commerce will be lost unless we can have great central highways from the Atlantic to the Pacific. We have just seen a statement that the Government has authorized the Postmaster General to enter into a contract for a mail ship line, from San Francisco to China monthly. This is another step in the progress of events, which are forcing on the period when Asiatic commerce will be carried over the American continent; just as in ancient times, the commerce between the East and the West was carried in grand caravans. The camel was then the loco-motive; but now we resort to an inanimate locomotive driven by steam. We have to feed them both; but our steam locomotive has a hundred fold the power and speed. Hence, the steam locomotive prevails over both the camel and any other conveyance of less speed. We add to this another fact, that it is less than half the distance from San Francisco to Cincinnati, overland, then it is by the Isthmus; while the Isthmus has the great disadvantage of transhipment. These great facts will force the Pacific Road through in a very short time after the war is completed; and when the road is made, it will be *the greatest highway the world ever saw.*

On either side, and probably on the main line, there must be several routes, and each one will have its specific duty and business. At first sight, every one will think the San Francisco route the best: and in fact this will be for some years true. But, in consequence of the superior production (taken as a whole) of the northern temperate climate; and the less breadth of the Northern Pacific, we have no doubt that Puget's Sound and the Straits of Fuca will ultimately be the greatest outlet of the American Continent. San Diego also must eventually be another outlet, and then there will be three grand ports on the Pacific for the outlet of the Northern American Commerce. At present, however, the problem is to get one great highway. The rest will soon follow. We have before us a statement of the "Central Pacific Railroad Company"—to a committee of the Nevada Legislature—which gives a full account of its affairs.

The following extracts from the statement of the company will show its means and operations:

NATIONAL AID.

"By the Pacific Railroad Act of 1862, as amended in 1864, this Company is entitled to United States Government six per cent thirty year bonds to the amount of $16,000 per mile for that portion of its line between Sacramento and Arcade Creek, seven miles, that being the point fixed by the President of the United States, under the Act, as the western base of the Sierra Nevadas, and $48,000 per mile for the 150 miles lying east of that point. They also are to receive twenty sections equal to 12,800 acres, per mile of railroad, of public land; that is to say, every section designated by odd numbers within twenty miles on each side of the railroad line, excepting the mineral lands, on which, however, the timber is granted to the Company. These Government bonds are, however, a lien upon the railroad and its fixtures, but the Company are authorized to issue mortgage bonds to an equal amount, which are to have priority over them."

STATE AID.

"The Legislature of the State of California, at its session in 1864, authorized the Company to issue $1,500,000 of its bonds, the interest of which, at seven per cent. per annum for twenty years, was provided to be paid by the State in gold coin, from a railroad fund raised by a special tax, in consideration of certain services to be rendered by the Company. These bonds were recently issued by the Company, and the constitutionality and binding force of the law has been fully established by a recent decision of the Supreme Court of this State. We send you herewith a pamphlet containing a copy of this law, with the opinions of eminent counsel, showing its validity and irrepealibility, and the decision of the Supreme Court thereon. These bonds are now available to the Company, and will enable us to employ all the laborers that can be worked to advantage in the grading of the road during this season."

There are also county subscriptions to the amount of a million of dollars.

The actual progress of the road at this time is thus exhibited:

"From this plain statement, it will be seen that this Company is now in a position to prosecute the work vigorously from this time onward until it is fully completed, for as the road is extended every 20 miles the national aid becomes available, both in bonds and land. The policy of the Directors has been, and probably will continue to be, not to proceed rashly, or to incur obligations that can not be promptly met. A contrary course would soon lead to financial embarrassment, and endanger the completion of the work. Feeling confident in the future, hand-bills have been issued calling for a large force of laborers, a copy of which is sent with this. With this increased number of workmen, the work will be pushed forward vigorously during the season.

We feel confident that the road will be completed twelve miles further, to Clipper Gap, by May next, and to Illinoistown, fifty-four miles from Sacramento, by September next. We expect to reach Dutch Flat, which is sixty-eight miles, in time for the Spring business of 1866, and the Yuba bottoms, near Crystal Lake, by the Fall of 1866. We have no doubt of being able to complete the road to the State line within the time fixed by the Act of Congress. How much sooner than that, depends upon the price of gold and the condition of financial affairs in the Atlantic States, matters which can not be foretold. Of one thing the people of Nevada may rest assured: that this Company will do all that can be done, by the judicious use of the means at their disposal, to complete the railroad to and through Nevada at the earliest possible moment. For this the *interest* of the Company is a sure guarantee."

ESTIMATES OF COST.

"The estimated cost of grading, masonry, bridging, trestling, depot buildings and water stations, from Newcastle to Clipper Gap, a distance of 12 miles, is $574,852. The estimated cost of the same work from Clipper Gap to the end of the first division of 50 miles, near Illinoistown, is $584,451. The estimated cost of the same work from the end of the 50 miles to Dutch Flat, a distance of 18 miles, is $2,169,277. The estimated cost of the Railroad from Dutch Flat to the State line is $6,065,000, and from the State line to the Big Bend of the Truckee, $2,500,000, as is shown by the report of Mr. Judah.

This Company has surveyed the line to a point five miles east of the Big Bend of the Truckee river, from which point to Salt Lake, it will probably be located on the cheapest and most direct route, passing through, or as near as practicable, the intermediate mining districts, the trade of which will constitute an important part of the business of the road. Where it is impracticable to carry the main line through the important mining towns, branch roads will be constructed"

The capital stock is $20,000,000; but as yet only $2,000,000 have been subscribed. It will be seen, however, that the subscription of the Government, the State of California, and the counties will complete the road to Nevada. From this exhibition, it appears not only that the Pacific end is likely to be made; but that it is far in advance of the operations at this end of the line. Why are our companies so dilatory here?

## STATISTICS OF OHIO.

MANSFIELD'S REPORT FOR 1865.

The report of E. D. MANSFIELD, presented to the Legislature last week, is unusually replete with interesting statistics touching all the great interests of the State, Social, Political, Industrial, Economical, Military, &c. We give an abstract of some of the more original portions of the report, and begin with

AGRICULTURAL STATISTICS.

The report gives the quantity of improved land in 1850, 9,851,493 acres 1860, 13,651,945. Increase 35 per cent. It is supposed that the amount of improved land, at present, is about what it was in 1860.

The number of acres under crops for years from 1860 is as follows:

| | 1860. | 1861. | 1862. | 1863. |
|---|---|---|---|---|
| Acres | 5,344,984 | 5,256,066 | 5,333,758 | 4,677,861 |
| Meadow | 1,588,562 | 1,461,018 | 1,570,252 | 1,092,480 |
| Orchard and Gardens | 500,000 | 500,000 | 500,000 | 500,000 |
| Pastures and Fallow | 5,666,454 | 5,830,919 | 5,079,136 | 6,277,657 |
| Clover | ..... | ..... | ..... | 403,884 |
| Flax | ..... | ..... | 52,546 | 95,170 |
| Total | 13,050,000 | 13,050,000 | 13,050,000 | 13,050,000 |

The general conclusion of the report on this point is, that in 1863 and 1864, the abstraction of so large a number of laborers for the army seriously reduced the culture of productive crops. It is thought that the war will hereafter be so much reduced in magnitude, that labor will be found in sufficient amount to carry on successfully and prosperously the agricultural operations of the State.

Up to the summer of 1863 the war has produced so sensible effect on the market of labor. We had sent out 100,000 men before the diminution began to be sensibly felt in the operations of farming. One principal reason for this was the increase of machinery which did the work of fully 50,000 men. Yet the want of labor was seriously felt in 1863, and in 1864 the harvests could not be secured, except by the co-operation of the town people and the assistance of female hands in many places. So that, on the whole, the harvest of 1864 was got in with little loss.

To determine the true money result of 1863, the report gives the following table of the value of agricultural products:

| | Amount. | Value. | Aggregate. |
|---|---|---|---|
| Corn, bush | 54,614,617 | $1 15 | $62,818,320 00 |
| Wheat, bush | 50,452,360 | 1 28 | 25,179,072 00 |
| Oats, bush | 11,317,560 | 80 | 9,054,048 00 |
| Barley, bush | 1,329,950 | 1 65 | 2,193263 00 |
| Rye, bush | 305,931 | 1 26 | 795,431 00 |
| Buckwheat, bush | 200,000 | 1 50 | 300,000 00 |
| Potatoes, bush | 5,297,498 | 80 | 4,237,998 50 |
| Hay, tons | 1,045,489 | 28 00 | 29,673,692 00 |
| Tobacco, lbs | 37,922,323 | 30 | 11,101,696 00 |
| Wool, lbs | 14,000,000 | 80 | 11,200,000 00 |
| Seeds, bush | 800,000 | ... | 2,575,550 00 |
| Butter, lbs | 31,131,275 | 25 | 7,780,311 00 |
| Cheese, lbs | 17,130,750 | 13 | 2,486,978 00 |
| Molasses, gall | 2,792,167 | 80 | 1,675,298 00 |
| Sugar, lbs | 6,780,000 | 15 | 1,017,000 00 |
| Wine, gall | 500,000 | 3 00 | 1,500,000 00 |
| Slaughtered animals | | | 35,000,000 00 |
| Exported animals (600,000) | | | 19,000,000 00 |
| Total value 1863 | | | $209,693,597 50 |
| Total value 1862 | | | 151,863,574 00 |
| Total value 1861 | | | 136,567,081 00 |

The gold value has not materially differed for these years. The average for 1863 was 40 per cent., and a gold value of $150,000,000 would be just about equivalent to the market value of the agricultural production of 1863, at Cincinnati on December, 1863.

THE DISTRIBUTION OF LANDS IN OHIO.

On the subject of the apportionment of the land among the cultivators, the report presents some important facts. Mr. Mansfield says that "the distribution of land among individuals is perhaps more important than that of its aggregate quantity. If wealth, however great, is in the hands of few farmers, the great majority must be in want, and Government fail as to its great end—the happiness and prosperity of the people."

He thinks, however, that the lands are pretty well distributed in this State, but in time our system, by so great a subdivision of the land, render farms too small for profitable culture. This subdivision has thus far been of great advantage, and it will probably be a century before farms will become so small as to occasion any serious mischief.

In 1850 the census gave 125 acres to each land owner in the State, but Mr. Mansfield's report for 1862 gave but 90 85-100, the number of owners being 277,000, of whom 240,000 are estimated to be actual farmers.

VALUE OF FARM LANDS.

Taking the whole valuation of lands, exclusive of town lots, to be in round numbers $500,000,000, devided equally among 277,000 owners, the average to each man is $1,841. Looking at this as a working capital for a working man, this is no doubt sufficient for a comfortable support. But it should be considered that the real merchantable value is double this sum; so that the agricultural population of Ohio are not only in a comfortable but in a wealthy condition.

DISTRIBUTION OF PERSONAL PROPERTY.

The valuation of real estate is $655,498,100; that of the personalties of Ohio is $357,198,016, making the whole aggregate $1,006,696,116. The increase of personal estate for fourteen years has been as follows:

| | |
|---|---|
| 1850 | $98,487,202 |
| 1855 | 283,118,815 |
| 1860 | 248,408,290 |
| 1862 | 243,615,212 |
| 1863 | 286,871,222 |
| 1864 | 357,198,016 |

The increase from 1862 to 1863 was 18 per cent., and for the next year 27 per cent. The personality has increased at a much greater ratio than the reality. This is accounted for, to a great extent, by the increase of the currency, which has not so much affected real estate.

Mr. Mansfield thinks that in estimating realty, those personalties are necessary to make land productive. Accordingly, he adds to the value of farm lands as follows:

| | |
|---|---|
| Horses | $30,111,021 |
| Cattle | 18,367,055 |
| Mules | 1,006,241 |
| Sheep | 17,592.657 |
| Hogs | 4,994.234 |
| Railroads | 14,814,330 |
| Total | $122,705,576 |

Of personal property not attached to the realty, he gives:

| | |
|---|---|
| Watches and pianos | $3,493,360 |
| Merchants' stock | 35,576,697 |
| Manufacturers' stock | 12,460,445 |
| Money | 47,811,311 |
| State banks (capital) | 4,708,820 |
| National banks (capital) | 6,000,000 |
| Private banks (capital) | 2,200,000 |
| Gas and coke companies | 1,283,000 |
| Express companies | 191,746 |
| Telegraph, bridge, &c., com'nies. | 1,647,066 |
| Credits. bank accounts | 53,951,082 |
| All other personalty | 44,412,611 |
| Total | $213,436,158 |
| Stocks not taxed | 9,185,423 |
| Total | $222,621,571 |

This is 22 per cent. of the aggregate property of the State.

Of the aggregate value of $1,015,881,539, $620,927.117 belongs to agriculture; $168,751,257 to the citizens of towns; $12,460,455 to manufacturers' and Mechanics' capital; $103,611,345 to mercantile and banking, exclusive of money, and $110,132,365 miscellaneous, including money.

So that the wealth of the State is apportioned to farmers 68 per cent; inhabitants of towns 19 per cent; manufacturers' and mechanics' capital 2 per cent., and to merchants and bankers 11 per cent.

The reader may be surprised at the small amount of capital invested in the useful arts, but it should be remembered that a large part of the manufacturing and mining capital counts real estate, such as mines in the country, factories and shops in the towns, which are placed under the heads of lands and lots. Also the largest part of the investments in manufactures of towns is put in labor, and makes up the weekly expense paid out of the products; so that the amount of active capital is much less in proportion than in other kinds of business. But it is quite evident that Ohio does not yet rank as a manufacturing State.

### LOSSES OF OHIO TROOPS.

The report gives the total losses of Ohio soldiers in 1864 at 5,490, which added to the total number of losses to the close of 1863 of 12,780, makes the aggregate to the close 1864 18,270. The assessors' returns, made in May, 1864, give the losses at 16,516, which corresponds favorably with Mr. Mansfield's estimate, up to December, 1863, of 12,780. It thus appears that the total losses of Ohio troops during the war, up to January, 1865, are only 18,270—much less than has been generally supposed.

The summary of the two principal hospital reports, Camp Dennison and Washington Park, for 1864 gives as the

| | |
|---|---|
| Total number of cases treated | 11,872 |
| Total number of deaths | 156 |
| Ratio of deaths | 1 in 80 |

Adding these results to those for 1863, for the same hospital, to-wit: Camp Dennison, Washington Park and the U. S. Marine, we have:

| | |
|---|---|
| Total cases treated | 21,647 |
| Deaths | 304 |
| Ratio of deaths to cases | 1 in 70 |

To this must be added the deaths in the U. S. Marine Hospital, which were not returned, to-wit: About 40, and the ratio of deaths to cases was 1 to 63. Camp Dennison has proved to be a healthy situation both to the well and to the sick that have been brought there. The low mortality of the sick is remarkable. It is to be noticed, however, that the invalids brought to these hospitals are of such cases as admit of transportation. Still the result is highly favorable.

### INTERNAL REVENUE.

The total amount of internal revenue raised in the State, for the year ending January 30, 1864, was $11, 802,272. Mr. Mansfield gives the amount for the year ending September 1, 1864, at $14,860,003; so that the increase of revenue for the month of July and August, 1864, above the corresponding months of 1863, was $3,057,731. In consequence of the increased whisky tax, and the better execution of the law, it is propable that the same rate of increase will continue during the coming years of 1864–'65. In that case the total amount of Internal Revenue raised in Ohio during the current year, (deducting the special income tax of 1863), will be $28,148,878.

The revenue raised from various sources of taxation in Ohio, for the year ending July 1, 1864, were as follows:

| | |
|---|---|
| Whisky | $6,442.408 |
| Fermented liquors | 209,685 |
| Cigars | 115,650 |
| Iron | 208,546 |
| Oil | 241,136 |
| All other manufactures & products. | 2,235,335 |
| Income tax | 1,117,691 |

Mr. Mansfield says that the heavy tax on whisky in the winter of 1863–'64 did not sensibly diminish the consumption of liquors, and it is not probable that the consumption will be diminished much below the present amount; but the tax of 1864–'65 will average double that of 1863–'64, and if we suppose that the sales will be diminished one-third, the double tax will produce over $9,000,000 in revenue. It is supposed that, in consequence of not taxing stocks on hand, at least one-third of the whisky made in 1864 escaped the increased tax. Mr. Mansfield thinks the tax on liquors in Ohio will yield the Government $12,000,000.

Ohio is about one-tenth of the population of the loyal States; and she pays about a tenth of the internal revenue; so that she stands just where her population indicates she should stand.

Mr. Mansfield estimates the internal revenue in Ohio for the year ending September 1st, 1765, as follows:

| | |
|---|---|
| Whisky | $12,000.000 |
| Incomes | 1,500,000 |
| On all other things | 10,500,000 |
| Total | $34,000,000 |

## PETROLEUM---ITS ORIGIN---WHERE FOUND, AND QUALITIES.

We take the following article from one in the Agricultural Report, by a Geologist. It seems from this, that the Western Coal Measures, or, rather the edges of them, where they come in contact with shale and sandstone are the deposites of Oils. This assumes, which is the present geological theory, that the oil is a deposit, which has descended down to the lowest reservoirs, and is then forced up by pressure. But, the probability is, that the oil, like salt, is created in certain rocks, which, as the one is *saltiferous*, so the other may be called *oleginous*. At the base of these rocks the largest deposits must necessarily be. The subject is very well treated in the following article, if the reader can manage to understand it in the abominably artificial, and altogether unnecessary terms which geologists use. It would be really a great improvement on what is *called the scienee* (for at present it is only a series of abreviations) of Geology, if its professors, and students would condescend to use common language.

"Fissures are filled with oil, and gas, and salt water, and different wells strike them at different depths. The oil-bearing sand rocks seem charged from top to bottom with gas and blow off from every fissure as it is passed through by the auger. Whence comes this gas, if not by subterranean distillation? It is impossible to postulate the gas first and the oil afterwards; for that order would require the generation of pressure sufficient afterwards, and the oil would be in the condition of a mechanically explosible fluid. The gas must be a subsequent expansion of the oil, as it is in the case of coal-mine fire-damp. Whence, then, comes the oil, and why has it collected in reservoirs? How are such reservoirs preserved, and what is their extent? It is easy, after these questions have been answered, to describe the mechanical propulsion of the oil to the surface, partly by gravity and partly by the pressure of the gas it has itself generated, through natural fissures producing

natural oil springs, or through artificial auger holes. The intermittent action of most of the flowing and spouting wells is like that of the Iceland geysers, where steam is the motive power. The oil men of the Mahoning valley say that more gas is blown off in winter than in summer.

"At the Edenburg well, above referred to, the blast of gas is sometimes violent enough to stop the pumping engine for half an hour at a time. Mr. Clark reports a periodicity or daily maximum in the paroxysms. He noticed for several weeks that they recurred with singular regularity a few minutes after eight o'clock in the evening, when the engine was forced to stop for twenty minutes or half an hour.

"In the almost unchanged horizontal posture of the western coal measures no considerable fracturing or fissuring took place. Faults of all kinds are uncommon and very small when they exist at all. The rise of the stratification from the Alleghany river towards Lake Erie is a fraction of one degree. The original contents of the rocks have therefore been preserved. Not so with the anthracite basins on the southeastern side of the great coal area. Crushed and upturned and over turned, contorted and fractured in every part, this part of the earth's crust has been dried and hardened, and exposed to chemical action from the superincumbent drainage waters, until its various formations (the coal beds included in the number) have been metamorphosed and partially recrystalized. The oils which they contained have been lost by dissolution and evaporation. The bituminous coals have become anthracites, and the last oil spring on the headwaters of the Lehigh, the Schnylkill, the Juniata, the Potomac, or the New river, ceased to flow many millions of years ago. In the west, on the contrary, in equally ancient, nay, in identically the same rocks, the petroleum still remains, having had no outlet; always hermetically sealed and under pressure. It remains partly condensed in coal beds and black shales, partly distributed through the sand rocks and limestones, and partly filling up the joints which the shrinking of ages has produced. Possibly a small portion of it may be held in caverns through the more soluble limestone strata. Especially important are the water-bearing horizons.

"The vertical cleavage planes and few down-throw fissures which exist play but a subordinate role to these. Rain-waters percolate from every hill surface and valley bed, sideways and downwards, leeching every permeable stratum that will give up its salt and oily contents. Along the outcrops of every coal bed issue innumerable springs of painted water. At the base of every great sand rock, and on the top of the clayey deposits next below it, collect the mixed proceeds of the drainage in a standing sheet of oily brine. Capillary attraction and hydrostatic pressure perpetually re-enforce the reservoir. The weight of rock on top and the pressure or disengaged oil-gas sends its filaments forward and upward by every secret crack to the surface again, holding it in every part ready for an explosive rush into the air when an artificial outlet is provided. If there be no fissure in the locality, the oil wells descend to the sheet of water at about the same depth. Where fissures intercept them they are of various depths and fortune, for a well may pass a fissure where its walls are polished and tight together. A well may also pass the water sheet where some change in the porosity of the rocks above and below has taken place to oppose a like obstruction. In some parts of the western coal field the dip is as high as five degrees, and the basins from five to ten miles wide. Sharp flexures make local dips of thirty degrees or more, and a central sub-anticlinal is sure to subdivide the basin. In the secondary basins thus formed the wells are more perfectly artesian as to the salt water; but it is upon the subdividing antielinals that the gas and oil collect. In such regions it is asserted that *all the blowing* and many of the spouting wells are ranged along the summits of such anticlinals. In the case of some of the old gas blowing salt-wells, their actions demonstrate that they have been bored past one gas-bearing stratum to another deeper salt water stratum; for when the water is allowed to rise in the auger hole, by stopping the pumps awhile, then the gas and oil no longer come up, the brine stopping their issue. In the case of neighboring wells of different depths striking a slanting fissure, the one which strikes it highest up will deliver gas; another, striking it lower down, will deliver oil; a third, striking it still lower down, will deliver nothing but salt water.

"The compressibility of coal-gas is one of its most dangerous qualities, increasing indefinitely the dangers of those explosions which annually cost so many valuable lives. Confined in the walls of the gangways and rooms, it issues from innumerable cells or pockets, the larger of which are called "blowers;" sometimes with the noise of heavy rain; sometimes with small reports. It collects among the timbers of the roof, in the upper galleries of the mine, in deserted portions of the colliery, and especially in those accumulations of refuse coal and slate, called "gob," or "goaf," with which the miners pillar up the superincumbent rocks. These acres of worked-out and filled up galleries become vast reservoirs of fire-damp. The gas collects especially over the anticlinal rolls. From these great powder magazines, solicited by the least diminution of barometric pressure in the atmosphere, the gas rushes out to fill the rooms. Long experience has shown that a falling barometer and explosions in coal mines always go together. But the mischief is accumulative. The vacuum produced by the first explosion is a new provocation to the world of back gas to leave its hiding places, come forward afresh, and produce another, and again another, until the proportion of air to gas becomes too small to make an explosive mixture; so that, like the stroke of lightning, the coal-mine explosion is not a unit, but a series, cause and effect reciprocally acting to produce the last result

"Among the most curious exhibitions of superior lightness of petroleum to other minerals with which it is found, and of the nice train of reasoning dependent thereon, is the observation of Mr. Vanuxem that the film of black bitumen found in the cavities of the calciferous sand rock of New York with crystals of bitter spar and quartz, occur on the upper side of the crystals, on the mother liquor of which they once floated as pellicles of oil; and, as the crystal hardened and grew, it moulded the oxydated oil to a sheet of bitumen, brittle, very pulverulent, of a shiny black, yielding little ash, and 11½ per cent. of (principally) water."

## PETROLEUM!

WHERE IT IS, AND WHAT IT IS!

We copy from the *Pittsburg Commercial* the following communication, relative to that absorbing subject—Petroleum. It is from the pen of a gentleman in whose views and theories we place great confidence, not only on account of his scientific acquirements, but also for the sounduess of his judgment, and the disinterested truthfulness with which he gives his opinion:

I have read with much interest an article, apparently editorial, in your issue of February 1st, headed "Petroleum, where it is and what it is." That article contains much which I think is erroneous, and much that is true, and looking more nearly in the right direction for the origin of this important production of the earth, than anything I have elsewhere seen published on the subject, from the fancies in the *Atlantic Monthly*, to the crude ideas which we find in many periodicals of less scientific pretentions. Some of the statements you give for facts touching the topographical basin having its centre about Pittsburg, I think very erroneous, and calculated to mislead the public as to the localities of the oil deposits.

You will pardon me if I regard the topography of the country even correctly represented, as having of itself little to do with the locality of oil. It originates and exists in the rocky structure of this portion of the earth's crust, and its origin and locality depend upon the position and mineralogical character of that alone.

I propose to give you my own views on the subject, hoping that, if not wholly sustained by the facts developed in future. I may at least be able to throw some light on the subject—to point out some land marks of value to investigators and collators of facts, for on these alone should all theories worthy of the least regard rest.

I may premise that I am not an oil speculator, having never been interested pecuniarily in the business; but the geology of our coal field and its underlying rocks, has been a matter of deeply interesting study for nearly thirty years, both by the aid of the observations of others and by extensive personal examina-

tions, and in the light of these examinations I can see no difficulty even without "treading upon the verge of human knowledge," in pointing out a source for the immense oil deposits of this basin and accounting for many of the phenomena attending them.

It is well known geological fact, that our coal field is underlaid—enclosed as in an outer basin, first, by a stratum of conglomerate rock, two hundred feet in thickness—secondly, by a series of strata of fine grained sandstone about three hundred and fifty feet in thickness, and thirdly a stratum of "black" or "bituminous" shale about two hundred and fifty feet in thickness. These measurements will apply only approximately, to all localities; being sometimes somewhat over or under what I have given. Beneath the "bituminous shale" we have the great cliff and blue limestone deposites, seen at Sandusky, Dayton, Cincinnati, Louisville, &c., and which constitutes the only rock over so large a portion of Ohio, Indiana and Kentucky, and has a thickness of 1,000 feet or more Each of the first named, cropping out beyond the verge of the coal field proper, occupy successively downwards, a larger breath of territory than the one preceding it. Consequently the territory of the "bituminous shale" greatly exceeds that of the coal field; the bottom of which is geologically five hundred and fifty feet above its upper surface. This stratum of shale crops out on the shore of Lake Erie from near Sandusky Bay into the State of New York, and having less dip there than further towards the interior of the basin, it passes under the Lake into Canada. It may be seen at the crossing of the Cleveland and Toledo Railroad over the Huron River at Monroeville,—ought to be seen on the Pittsburg and Fort Wayne Railroad, in any of the deep streams between Mansfield and Bucyrus. The city of Columbus stands upon its western limit, and it crosses the Ohio river into Kentucky between Portsmouth and Maysville. This bituminous shale at its exposed surfaces presents few of its real characteristics. The bleaching process of the atmosphere has deprived it of its real color, and much of its more volative constituents have been evaporated; but by opening into the bed a short distance, it will be found of a brownish black color, omitting an odor of bitumen on being rubbed or slightly heated, and will flame when placed upon the fire. The proportion of bituminous matter it contains may vary somewhat in different localities. The specimens I experimented upon many years ago, were procured by myself in the bed of Tinker's Creek, where the C. & P. R. R. now crosses that stream over the high bridge east of the village of Bedford, in Cuyahoga county, Ohio, and also on a branch of the Chagrin river, a few miles eastward of the same place. These specimens lost *one eighth* of their weight by subjection to the fire, while the pieces retained their original size and shape.

Here then we have in this immense bed of bituminous shale, 250 feet thick, and underlying a portion of the State of New York, a large part of Pennsylvania, Ohio, Kentucky and Tennessee, all of West Virginia and a part of Virginia, a source capable of producing a supply of petroleum far beyond anything we have yet conceived, and to which all the facts yet brought to my knowledge point as its origin. Dipping with the overlying strata, according to the best data yet obtainted, at the rate of a little over thirty-seven feet to the mile, towards the geological centre of the basin, somewhere between the Ohio river and the foot of the mountains, this bituminous shale would at the centre of the basin attain a depth of probably 6,000 or 7,000 feet beneath the surface, and possibly more. At Parkersburg its upper surface can hardly be less than 3,000 feet lower than the Ohio river, at which distance from the surface of the earth we would have at its lower surface, according to the progressive increase of heat downward, a temperature of about 125° of F. Nearer the centre of the basin it would be proportionately increased, and the slow distillation of oil and gas would take place from it. And as these substances were envolved, the oil would be driven by the immense expansive pressure of the gas in every direction which afforded it a passage. This movement of the oil by the pressure of its expansive associate would of course be upward or laterally, along the planes of stratification,—because it would be in these directions alone it would find vent. But as the overlaying strata are, in most places, sufficiently impervious to bear an enormous pressure without any perceptible leak, as is proven by the powerful outbursts of gas, often experienced in perforations made for oil, the movement of oil and gas would approach the surface in those places only where fissures of some sort extended to permit its passage in that direction. And on the other hand it might be driven along the more open seams of the stratification to long distances from where the heat of the earth was sufficient for its distillation, and then come to the surface in small quantities where a fissure extending in that direction was reached; and it might all along its line of movement be deposited in such fissures and caverns as lay in its course. These deposits would almost certainly be accompanied by gas more or less compressed, and by means of which we have the flowing wells, when a tributary or seam connecting with one of these deposits was reached by the implements of the borer.

A corroboration of these views is found in the facts furnished by the Western Virginia oil district. There the oil accompanied by gas, is being driven to the surface in greater or less quantity, all along that rupture of the upper strata of the earth, extending across the counties of Pleasants, Wood, Richie and Wirt, (and possibly in both directions much further) known as the "break," and which furnishes caverns for its deposit, and fissure by which it reaches the surface; and along which more or less oil is found at all depths This region I have not visited since the winter of 1860 and 1861, when I traversed on foot nearly the whole line of this "break" from the Ohio river to the Burning Spring Never having heard of it before. I was much interested in it, being the first rupture of the kind I had ever seen or heard of in all this coal field. It appeared to me then rather as a contraction or crumpling together of the upper crust, than as an "unheaval," as I have sometimes lately seen it represented by newspaper correspondents. I was confirmed in this idea when I subsequently learned, on reaching Parkersburg, that there existed a few miles to the eastward, a corresponding vertical fissure of a very remarkable character, filled with a solid chrystalized bitumen, (of which I obtained specimens) a product doubtless having the same origin as the oil The whole phenomena was identical with what I had observed to take place in large extents of heavy field ice—for instances on Green Bay when solidly frozen over; and which I did not doubt to be the effect of contraction and expansion caused by varying temperature.

If the foregoing views are correct, it is, I think reasonable to expect Petroleum will be found in greater or less quantities throughout the whole area occupied by the bituminous shale, governed only by the fissures furnished for its deposit, the openings between them and the source of supply, and the passages extending towards the surface of the earth, permitting it to approach within striking distance of the explorer.

It is not claimed the theory I have presented is wholly original with myself, but it is believed similar views are entertained by many who are conversant with the geological structure of the region over which Petroleum is found in the valley of the Ohio. My only object is the search for and propagation of truth; and if any of your readers are in possession of facts which will throw further light upon the subject, even if they controvert the views here given, I hope they will not fail to perform a duty they owe to the world by stating them fully.

C. M.

## WISCONSIN RAILROAD DECISION.

Illegality of Railroad Companies to engage in business not authorized by their charters. No power to buy and hold lands situated at a distance from their roads. Fradulent representations as to pecuniary condition of Railroad Companies. Liability for repersentations of their officers and agents. Conveyance of land to Rail road Companies through fraud and misrepresentation of their officers and agents.

The late case of Waldo *vs.* The Chicago, St. Paul and Fond du Lac Railroad Company, and others, was an appeal to the Supreme Court of the State of Wisconsin from the Circuit Court of Jefferson County in that State.

It was an action to have certain conveyances of land, made by the plaintiff to one Wm. B. Ogden, and by the latter to one Mahlon D. Ogden, set aside, or declared void, and to compel a re-conveyance to the plaintiff.

The complaint, after stating that the Chicago, St. Paul and Fond du Lac Railroad Company in the fall or winter of 1865, appointed a committee to canvass for subscription to the stock of said company to be paid by conveyances of land to said Wm. B. Ogden, and that Bradley, Pease, Wood and Johnson, who were members of said committee, came, during said winter, to the County of Jefferson, and that various public speeches were made by them and said Ogden, to induce subscriptions to said stock, payable in land, and that various committees of citizens were appointed to co-operate with them in canvassing for such subscriptions, alleged that in February and May, 1857, the plaintiff conveyed to said Ogden, certain lands by warranty deed in the usual form, and received therefor $6,200 of the stock of said company, and that the plaintiff was induced to make said conveyance for said stock solely by means of certain false and fraudulent representations made at public meetings and in private, by said Ogden and said Bradley, Pease, Wood and Johnson, and by other persons who acted as citizen committees, and stated what said Ogden and the others above named directed them to state, believing all that was told to them, which representations were in substance as follows:

That said company under a former organization when it was known as the Rock River Union Valley Railroad Company, had been largely in debt, and that the present company had succeeded to their rights and liabilities, and after securing their portion of the land grant from the States of Wisconsin and Michigan (donated by the U. S.), had become in good credit, and the former creditors of the old company, who had also been creditors of the, now wishing to share in said land grant, had nearly all consented to converting their claims against said company into stock, and that this process was still going on and woul

soon be completed so that the company would not owe a dollar; that the company was in good condition and credit; that the net earnings of the finished portion of the road from Fond du Lac to the La Crosse Junction, and from Chicago to Janesville, for the last six months, had been equal to 4½ per cent. on the entire cost of the road, represented by three millions of stock, and that the directors would have declared a semi-annual dividend of 4½ per cent., but they thought it best to use said earnings to carry on the road, and they had been carried to the construction fund instead of being divided among the stockholders; that the company only needed $600,000 in land, mortgages, bonds and cash subscriptions to complete the connecting link between La Crosse Junction and Janesville, and were getting it without difficulty; that the stock would soon be at par and above par; that the land grants made to said company were worth, at a low estimate, thirteen and a half millions of dollars, and that the road when completed from Chicago to Fond du Lac would certainly pay dividends of 10 per cent. per annum, &c., whereas in fact the said Ogden, Bradley, Pease, Wood and Johnson well knew that the company was at that time indebted to its mortgage bondholders about $1,800,000, and to the other creditors unsecured a floating debt of about $1,600,000, and was not in good condition,—had no available resources with which to pay the principal or interest of its debts, and was on the verge of bankruptcy, and was without credit among capitalists, and its bonds and stock of very little value, and that the portion of the road completed was not earning any such net sum as 4½ per cent. for six months upon the cost thereof, as represented by the stock, and that said net earnings, whatever they may have been, had not been applied to extend the road, but to pay former debts and the expenses of the company; that the $600,000 proposed to be raised to enable the company to build its road from Janesville to La Crosse Junction, would have very little value for that purpose, and would be swallowed up by the creditors of the company; that there was no prospect of the completion of said road from Janesville to said Junction for years, nor until the road should be in the hands of its bondholders or purchasers at a sale under their mortgage, that there was no good reason to suppose that the company would ever earn enough to pay more than the interest on its debts, or that its stock would ever be worth anything; and that the lands granted to the company were really worthless, and a large portion of them had long been subject to private entry at fifty cents per acre, and would be a poor investment at any price when taxes would have to be paid. The complaint also alleged that all the proceedings of said Ogden, and of the said committee of the company, were fraudulent in intent and designed only to obtain so much more land as assets before the final bankruptcy of the company; and also that the plaintiff parted with his land solely in consequence of said false representations, and that he is ready and able to surrender the stock issued to him, to be cancelled as the court shall direct.

The other allegations of the complaint are sufficiently stated in the opinion of the court.

The company and the Ogdens demurred separately on the ground that the complaint did not state facts sufficient to constitute a cause of action.

The Court overruled the demurrers and the defendants appealed.

*By the Court*, COLE, J.—In the case of Clark *vs.* Farrington 11 Wis. R. 306, 424, this court, among other things, held that a railroad corporation could not engage in any distinct or separate branch of business not authorized by its charter, for the purpose of rising funds to accomplish the objects for which it was created, that while the corporation in the exercise of the powers conferred upon it by its charter might adopt any convenient means proper in themselves, to accomplish the objects of its creation, it could not embark in the business of banking, or manufacturing or of speculating in real estate, to raise money to build its road, for this would be acting outside of its charter The distinction indicated by these illustrations is plain, important and fundamental. A railroad corporation created for the purpose of building and operating a railroad might buy its depot ground, its road bed, its rolling stock, and pay for these things in the stock of the company, without exceeding its powers or violating any principle of public policy.

It might exchange it stock for road ties, or pay in stock for the grading of its road as well as sell its stock for the money with which to pay for these necessary and indispensable things, and still it would be doing nothing more than the company was authorized to do. And in that case we held, if the corporation should resort to a transaction of a two-fold character, and receive a bond and mortgage in payment of a stock subscription, and then sell the securities to raise money with which to build and equip its road, it would still be acting within the powers conferred upon it by its charter. But when a corporation created for the purpose of building and operating a railroad, goes into the business of banking, or manufacturing and selling goods, or dealing and speculating in real estate, because its corporators or board of directors think such adventures may be profitable, or if a bank should go to building and operating a railroad for like reason, it is easy to see that in each instance the corporation is attempting to transact business which, under its organic act, it has no right or power to do. And if the corporation might embark in a separate and distinct business, not contemplated by its charter, merely because it was supposed it would be profitable, and increase its means and resources, there would be no safety to the public in granting any special charters, and none to individuals who might invest in the stock of the company.

We have, therefore, no difficulty whatever in arriving at the conclusion that the appellent could not go to speculating in real estate, and had no power under its charter to buy and hold lands situated at a distance from its road, which the company did not want and could not possibly use in constructing and operating its road, but our real difficulty in the case has been to determine what became of the title to the lands conveyed under the circumstances disclosed in the complaint. This question we have examined with all the care and diligence we were able to bestow upon the case, consistently with our other duties, and we have not arrived at any satisfactory result upon it. We think the demurrer to the complaint was properly overruled upon another ground, which we will presently notice, but our desire was to pass upon the main question in the case.

In the present case, the respondent states that for the purpose of paying his subscription to the stock of the company, be conveyed to Wm. B. Ogden the lands mentioned in the complaint, to hold the same in trust for the corporation. He avers that the lands are not all timber or woodlands, that there was no stone quarry or gravel bed thereon, that they are not on or contiguous to the line of the railroad, and, as located, could be of no use or advantage to, and were not necessary for the purposes of the road. The complaint further alleges that Wm. B. Ogden has conveyed the lands to Mahlon D. Ogden, who took the conveyance with full notice of the circumstances under which they were obtained from the erspondent, and holds the same for the use and benefit of the company. From these allegations it would seem that the corporation proposed embarking in the business of buying and selling real estate as a matter of speculation and profit, a thing which it clearly had no right to do, It was authorized to take and hold such lands and real estate as were necessary and proper for the use and enjoyment of its road but no more.

It is urged that when a grantor conveys lands to a railroad company, or to a trustee for its benefit, which he knows the company does not want and can not use for the purpose of building and operating its road, he is a party to the illegal contract, and can not claim relief in a court of equity. He becomes, it is said, a perpetrator in the unlawful contract, and therefore should meet the consequences of his own act. On the contrary, it is said that the restriction is directed against the corporation alone, to prevent it from engaging in illegal transactions and that where it obtains real estate for a purpose not authorized by its charter, it can be compelled, in a suit in disaffirmance of the contract to restore the land which it has obtained. In the present case it will be observed that the lands were conveyed to a trustee, impressed with a trust which the law does not sanction, and does this change the law of the case, or affect the rights of the respondent? If he could reclaim the lands had they been conveyed directly to the company, ought he not to do so when they are conveyed to a trustee for its use and benefit? These questions have presented themselves to our consideration in the examination of this case, and we should have been glad to have decided them, had we come to a satisfactory conclusion upon them. They are interesting and important and controlling in this case; but we are compelled to leave them for further argument and consideration.

But upon the other ground, that the deeds were obtained from him by false and fraudulent representations as to the pecuniary condition of the company, we think the respondent shows himself entitled to relief. He alleges that Wm. B. Ogden, and the persons acting with him in soliciting stock subscriptions, represented that the company was in good pecuniary condition and repute; that the part of the road completed from Fond du Lac to the La Crosse Junction, and from Janesville to Chicago, was earning money very rapidly, and, in fact, that the net earnings of the road for six months then last past, had been equal to 4½ per cent on the entire cost of the road, which amounted to three millions of stock, while at the time they well knew that the company was on the verge of bankruptcy, and about to fall, and was without credit, its bonds and stock of little value; and that the road in operation was not earning any such sums as were represented.

It is very clear that those representations as to the pecuniary condition of the company and the earning of the road, were material, and were such as the respondent had a right to rely upon when he sold his land for the stock of the corporation. He could not know what the road was earning, or that the company, instead of being in a sound financial condition, was upon the eve of bankruptcy. It

is evident that these matters, which fixed the value of the stock could only be known to the agents and officers of the road They had access to the books and records of the company, knew what the road was earning, and whether the corporation was solvent. and nothing was more reasonable or natural than that a party about to subscribe for stock should rely upon the statements of its officers and agents who were around soliciting subscriptions.

It is said that the company ought not to be held responsible for the misrepresentations of its agents, but we think otherwise. They were going about the country obtaining subscriptions, and whatever fraudulent representations they made as to the condition of the road and the value of the stocks, while doing this, must be deemed to be made by them in the execution of their agency, and for which the company is liable. This we think is very clear from the authorities. Sanford *vs* Handy, 23 Wend , 260; Gibson *vs.* D'Este, 21 Eng. Ch. R, 542; Younge and Collyer, 542,570; Phil., Wilmington and Baltimore Railroad Co. *vs.* Quigley, 21 How. (U S ) 202.

We therefore think that if the allegation of the complaint in respect to these false and fradulent statements of the agents shall be sustained by the proof, the respondent will be entitled to have the contract rescinded on the ground of fraud.

The order of the circuit court overruling the demurrer is affirmed.

Order affirmed accordingly.

## TRIUMPH OF PACIFIC R. R. CAUSE.

We copy the following from the *California Farmer*, and feel confident that it will be heralded with joy by friends of the Pacific Railroad:

In spite of all the bitter opposition that has been made against the Pacific Railroad from some journals of this city, and they will soon be not only ashamed of it, but repent in dust and ashes too; in spite of all the bitter, vindictive and relentless tirade of abuse which has been heaped upon President Stanford and all the earnest Directors, Managers and friends of this mighty work, the sunshine of triumph now dawns upon them and their enterprise, after all the delays and hindrances that it was possible for vindictive enemies of this great work to throw in its way. The President and Directors have, by their steadfast management, swept away like chaff those miserable subterfuges, and the Supreme Court has decided in their favor on all points. How the editors of these journals that have so recklessly assailed their cause would have enjoyed the *jingle of the gold*, as it was carted last Tuesday from the State Treasury to the company's office! would n't they! The Sacramento Union, of the 3d inst, thus speaks on the subject:

An Important Railroad Decision.—A short time ago the Attorney-General commenced an action to enjoin the State Treasurer from paying the interest on the Pacific Railroad bonds, issued under the laws of last winter $52,500 of which fell due on the 1st inst. The object was to test the constitutionality of the law, the enemies of the enterprise, having industriously circulated reports that it was invalid. The District Court held it to be constitutional, refused to grant the injunction, and dismissed the complaint. An appeal was promptly taken, and yesterday the Supreme Court entered an order affirming the judgment of the District Court in those respects, but modified other portions which are unimportant. This decision settles the question of the validity of the law and the liability of the State to pay the interest for twenty years on $1,500,000 of these bonds, in gold coin. This large amount of bonds is readily available to the company, as the decision will make them equal in value to State bonds and they will probably sell for as high a price. The money is in the treasury to pay the first semi-annual installment of interest and will be paid to day. We are informed that the company has given orders to increase the force of laborers to 2,000, and to push the work as rapidly as possible. Long before these bonds can be exhausted, the company will receive the $1,264,000 due them from the National Government, so that the work will undoubtedly progress without delay during the present year.

This decision secures to the Railroad not only these State bonds as good, but gives an increased value to them, and will carry with it the $600,000 from our city, and soon the large amount from the National treasury also, so that in a short time the Pacific Railroad Company will have a cash capital in their vaults of Millions to work with. We wonder how this news will affect the "Dutch Flat" folks.

On the day following the rendering of this decision, the Company drew from the State Treasury $51,555, which amount is the first semi-annual installment of interest on all bonds amounting to 1,473, $1.000 each.

What a glorious beginning for the new year for the President and Directors'! Success to them, say we. They have nobly toiled and nobly earned the laurels which they will wear on the completion of this great work.

Atlantic & Great Western Railroad.—It has already been stated in these columns that S. S. L'Hommedieu, Esq , President of the C. H. & D. R. R, had been elected President of the Great Western & Atlantic Railroad, and that D. McLaren, Esq., had been appointed General Superintendent of the same Company. We now publish the official announcement of these changes:

A. & G. W. R. Secretary's Office,
Meadville, Pa., Feb. 13.

At a meeting of the Board of Directors of the Atlantic & Great Western Railway Companies of New York and Ohio, held on the 25th ultimo, S. S. L'Hommedieu, Esq., was elected President of said Companies, Vice, James Robb, Esq., resigned.

Mr. L'Hommedieu, was also constituted Chairman of the Central Board of Management of the entire Lines composing the Atlantic and Great Western Railway. Said appointment took effect on the last instant.

J. C. Calhoun, Secretary.

Secretary's Office,
Meadville, Pa., Feb. 13.

At a meeting of the Boards of Directiors of the Atlantic & Great Western Railway Companies of New York, Pennsylvania and Ohio, held on the 25th ult., D. McLaren, Esq., was elected General Superintendent of this Line of Railway, vice H. F. Sweetser, Esq., resigned.

Mr. McLaren will commence the discharge of his duties on the 15th inst.

J. C. Calhoun, Secretary.

## RIGHT OF EMINENT DOMAIN.

In the equity case of *E. D Marshall* vs. *The Pennsylvania Railway Company*, recently brought before the Supreme Court of Pennsylvania, a decision of some importance was made. The sole question argued on this motion for a preliminary injunction arises out of the question whether the company have the right of eminent domain, so as to enable them to take the plaintiff's property, on which to erect a permanent depot and necessary buildings connected therewith, for the uses and convenience of their road.

This company became the purchasers of the main line of the public works under the provisions of an act of Assembly of May 16, 1857, a part of which was the railroad from Columbia to Philadelphia. The 11th section of that act provides:

"That should any company, already incorporated by this Commonwealth, become the purchaser of said main line, they shall possess, hold and use the same under the provision of their act of incorporation, and any supplements thereto, modified however, so as to embrace all the privileges, restrictions and conditions granted by the act in addition thereto."

By the 11th section of the act of 13th April, 1846, which is the act incorporating the Pennsylvania Railroad Co., it is amongst other things provided, that the company may "enter into and upon, and occupy all lands on which the said railroad or depots, warehouses, offices, toll-houses, engine and water stations, or other buildings or appurtenances hereinbefore mentioned, may be located, or which may be necessary or convenient for the erection of the same, or for any other purpose necessary or useful in the construction, maintenance, or repairs of said railroad, and therein and thereon to dig, excavate and embank, make grades, lay down and construct the same."

The right of the company, under its charter, as referred to above, to take private property for the purposes of such a construction or erection as the bill purposes to enjoin, on compensation being made or secured, can not admit of a doubt. And the State in contemplating the possibility of a purchase by a company having such a right of eminent domain in its original charter, very properly, and certainly very expressly, gave the right to hold, enjoy and possess the new acquisition under and on the same terms Construction is secured in the express terms of the section quoted.

The act does not mean that the railroad purchasers should be under provisions, satisfied by being exercised, but under the provisions of the charter in full activity and vitality, so that whatever right be exercised on the terms of the charter when the road was being made originally can be still exercised in the enjoyment of the road purchased, so far as that is understood. There seems to me no room for amplification on this point. As the preliminaries for taking the property in question are not disputed as to legality and regularity, I see no ground to grant the injunction asked for on the ground of want of power. Injunction refused.

—The receipts on the Grand Trunk Railway for the week ending Feb. 11, were:

| | |
|---|---|
| 1865... | $102,128 |
| 1864... | 107,789 |
| Decrease | $5,662 |

## LOCOMOTIVES FOR STEEP GRADES.

Within the last twelve years French and Austrian engineers have designed and built locomotives of uncommon weight and tractive power to ascend the steep inclines of railways over mountains; one had 1,861 feet of heating surface, and weighed 46 tons, and with water and tender 69¾ tons. Another was projected by Flachat, to have 3,981 feet of heating surface. Another had four cylinders and twelve driving wheels. Some of the engines of this mammoth class have been altered, others laid up.

Another way of working on steep inclines and sharp curves was tried long ago in mountain regions, and is now recommended by an English locomotive builder; it consists of coupling two engines by their foot boards so that one driver and one fireman can work them both. For convenience they must be tank engines, or at least there must be accommodation for fuel near the foot-board. The plan of the builder alluded to is to couple two 4-wheel tank engines; the coupling, for safety, being so arranged that in case one engine breaks its hind axle the other will hold it up.

Two engines coupled are more simple than the 4-cylinder engine; and the only advantage of the latter is that there is but one boiler. To compensate for this, the English builder connects his boilers by a flexible pipe, and this reduces the advantage to that of having but one furnace. But there are many engines whose fire-boxes are devided by partitions, some lengthwise, some crosswise; and there are reasons—among them that of increased fire-box surface—in favor of two small grates instead of one large one of equal area. On the whole, we see no forcible argument in favor of the heavy engine; but rather in its effect on the rails and in the lying up for repairs, we see many reasons in favor of the coupled system

Not only on steep and crooked lines, but on ordinary lines of variable traffic, these reasons hold good. We have known railway directors, whose lines had traffic for but two cars, to order engines that could draw seven cars, so that they might draw excursion trains, which they expected less than twenty times in a year. Other lines use heavy engines because on Saturday evenings and Monday mornings their trains are heavy. In such cases two common engines, with their tenders and two men each, have in times past been used. But as they have of late years got heavier engines, we presume they have concluded that were more economical. Nevertheless we doubt the soundness of this conclusion, because the track must suffer from the constant use of heavy engines, and the increased cost of repairs of track, probably out weighs the additional expense of the assistant engines, with their tenders and men, to meet the occasional necessities of increased traffic.

But there seems to be no need of more than two men to work two engines coupled: this has been settled by sufficient practice. The only difficulty is to arrange for the supply of water and fuel, so that one man can supply both engines; and in this there is room for the exercise of talent, to design an engine that can work well coupled, and also work singly as well as the engines now in use. Tank engines have little of this difficulty, but tender engines are deemed less injurious to the track, and will be generally used, and must be adapted to work in this way if the system is ever practiced.—*Artisan.*

## LAW REPORT.

IMPORTANT TO MAGNETIC TELEGRAPH COMPANIES. —THE QUESTION AS TO THEIR RIGHT TO EXERCISE THE POWER OF EMINENT DOMAIN DECIDED.

The United States Telegraph Company, of Ohio, *vs.* The Cincinnati, Hamilton & Dayton Railroad Company.

In the Probate Court, yesterday, Judge Woodruff delivered his opinion in this case, as follows:

The case is presented upon the petition of plaintiffs asking for an appropriation of a right to construct, on and along the western side of the Cincinnati, Hamilton & Dayton Railroad, a magnetic telegraph, including the right to set posts, run wires, and to do other things necessary to establish and keep up said telegraph line.

The defendants—The Cincinnati, Hamilton & Dayton Railroad Company—moved to dismiss the plaintiffs' petition for want of jurisdiction, which motion is in the nature of a demurrer. The want of jurisdiction is not put upon the ground that the Probate Court can not adjudicate upon a question of condemnation of private property, but because no power exists under the statutes of the State, conferring such right on Telegraph Companies—or if conferred, that it can not ask for the appropriation as against the rights of the Railroad Company.

The Court is incidentally informed that the Cincinnati, Hamilton & Dayton Railroad Company have contracted with the Western Union Telegraph Company for a right of way over said road, and is not at liberty to consent to the petition of the present plaintiffs, but permits the Western Union Telegraph Company to contest the right with the United States Telegraph Company.

Although exceptions are taken to the petition on the ground that the Court can not condemn land out of Hamilton county; that a telegraph line is not a public use; and that the Legislature can not make it so by statute, unless it is so in fact, and that the right asked by the petition is too indefinite to entitle plaintiffs to have the condemnation sought; yet, these objections may all be obviated if the right to appropriation exists. That is, the Court may adjudicate as to that part of the road which lies in Hamilton county. It may be ascertained whether a telegraph line is a public use, and if the petition is too indefinite it may be amended; so that the important questions in the case are, 1st—Have telegraph companies, under the laws of Ohio, power to compel a condemnation of private property for the use of their lines, and to subserve the public welfare? 2 If they have this power, can they exercise it against the railroad corporation?

To say that the magnetic telegraph does not subserve the public welfare would be to contradict public sentiment. Their importance is becoming more manifest as their usefulness is extended. That their practical operation may be improved, and that they may be used for many improper purposes, is also true; and yet they have become one of the indispensable improvements of the present progressive age. But whether they are yet entitled to exercise the power of *eminent domain* is to be ascertained from a proper construction of existing legislation.

If the power is conferred, it must be found in the act entitled "An act to provide for the creation and regulation of incorporated companies in the State of Ohio," passed May 1st, 1852. With respect to the exercise of this power the Legislatures and Courts, both in Europe and America, have been extremely cautious in conferring it—and properly so, as it is a power liable to great abuse. Hence, when we look into the statutes for the power claimed in this instance by the plaintiffs, it is necessary to criticise the language used in the several sections of the act, and to ascertain whether the Legislature intended to place all the corporations therein named upon the same footing in this respect, or whether they have conferred it upon some, and denied it or withheld it from others.

In the section (10) creating railroad companies the power *to appropriate private property* is expressly given, provided full compensation is first made to the owners. In addition to this power, by section 15, they may acquire, *by purchase or gift*, any lands, &c., necessary for their railroad, and may convey the same.

Section 27 of the same act, creating turnpike and plank-road companies, gives to them the same general corporate powers as is provided for railroad companies; and in section 32, they give such companies the additional power of making the appropriation and paying the damages in the mode prescribed by law.

Section 44, creating magnetic telegraph companies, authorizes them to construct lines of magnetic telegraph, and confers upon them the same general powers as is provided in the 3d section of said act—and Section 47 authorizes them to construct their lines from point to point, along and upon any of the public roads, &c., provided that the same shall not incommode the public in the use of said roads or highways. It is claimed by the plaintiffs that these terms include all roads, whether those laid out by County Commissioners, as State and county roads—townsbip roads, as well as railroads, turnpike and plank roads. Before the introduction of railroads, and others constructed by corporations, public roads were understood to mean free roads; and if the power exists to traverse roads built by corporations, it must also involve the power to appropriate their bridges, &c., as part of the road. In the absence of some unequivocal right, on the part of telegraph companies, to condemn lands under the statute, we feel compelled to construe the provision in the 47th section, to-wit: "That telegraph companies may construct their lines along and upon any of the public roads"—to mean the public State, county and township roads, laid out and kept in order by taxation at the public expense, and not those established by railroad corporations, quasi-private or company roads. For we can not suppose that the Legislature, after giving to a corporation the power to build a railroad, would by a general provision short of the power to condemn, on paying for the privilege, would encumber the grant with burthens that might render it useless The case of the Charles River Bridge *vs.* Warren Bridge and others; 11 Peters U. S. Rep., p. 545; the Supreme Court says the principle recognized in cases of public grant is that nothing passes by implication. The exercise of the corporate franchise, being restrictive of individual rights, can not be extended beyond the letter and spirit of the act of incorporation.

The principle contended for by plaintiffs in this case, that when a grant of power is conferred it impliedly carries with it the right to do all things necessary to the execution of the power conferred, is correct, as a mere legal proposition; but before it can be applied to any given case, we must be certain that the power has been conferred: In any other view

it would be merely *petitio principii.* The power to locate and construct a *railroad,* does not necessarily carry with it the power of *eminent domain,* and useless in the act referred to this power of appropriation of private property had been expressly conferred, railroad companies could not have entered upon private property for the purpose of constructing their roads.

Railroad and turnpike and plank road companies having this power by express grant of the Legislature, and the same act giving to the magnetic telegraph companies, gas-light and water companies, and manufacturing companies, the same *general powers* as is provided in the third section of said act, it is claimed that these last named companies have also power to condemn private property for public use, But it will be observed that it is not by virtue of this third section that railroads, turnpike, plank-road companies exercise their power; it is conferred *specially* by other sections to which I have referred.

The question naturally arises, why did not the Legislature confer upon the last-named companies, to-wit: telegraph, bridge and manufacturing companies, special power to the same effect, for there is as much, if not stronger reason why they should have done so, than in the case of railroads and turnpikes.

We find also a provision in Sec. 80 of the same act as follows:

"A change in the location and termini of any *railroad,* turnpike and plank-road, may be made in the same manner as is provided in the 76th Section of this act, for the further extension of time."

Now this privilege is not granted to any but railroad and turnpike and plankroad companies, and yet it is just as important to telegraph, bridge, or manufacturing companies as to railroad companies. The reason would seem to be that these latter companies, not having the original power to appropriate lands, they did not need the power to change their location, being privileged to go anywhere upon the *public roads of the State.*

In considering this case, we do not notice the right of the Western Union Telegraph Company; they are not a party to this proceeding, their counsel being permitted only to argue the motion to dismiss, filed by the Cincinnati, Hamilton & Dayton Railroad Company. What their rights are, it is not necessary for this Court to know, as it is important to the decision of this motion; neither is it necessary to consider the questions, how far one corporation can condemn the franchises of another corporation, under the view which the Court takes of this motion. That it may be done, appears plain from the authorities cited; but the right to do so depends upon the circumstances of each particular case. The cases upon this point are as follows:

Inhabitants of Springfield *vs.* Connecticut River Railroad Company. 4 Cushing Rep. p. 63; 14 Illinois, p. 314; 23 Pickering, p. 391; 3 Grafton, 270; 10 Lee, 77.

And the principal established is, that a grant of land, on condemnation for one public use, must yield to that of another more urgent; but in both cases, the power to condemn must first exist in the State, as the supreme power, or be conferred by it under the right of eminent domain, as the high prerogative of sovereignty. "But when it is the intention of the Legislature to grant a power to take land already appropriated to another public use, such intention must be shown by express words or by necessary implication."

This necessary implication, we think, does not exist in the present case.

The principal conferred by municipal corporations on water and gas companies, seem to us to rest upon a different principle from that of condemnation. The exercise of these privileges being for the benefit of the citizens, and promotive of their comfort, as a police regulation, it becomes a matter of contract, in which the city, instead of furnishing itself with gas and water, for a full pecuniary consideration, transfers the right to others, and the corporation, under well-defined conditions, allows these companies to use the public streets; this is quite different from the case of one incorporated company condemning the franchise of another incorporated company, established for similar or different purposes. Fifth Ohio Reports, page 143—the Court say, that the Legislature must declare, by law, that the subject for which the condemnation is to be made, is a public use—that the public welfare requires it.

The questions, whether or not provision is or ought to be made for compensation under our corporation act, or to which class of companies the power is given to consolidate, or what power the Government of the United States has to condemn the property of private persons or corporation, for the transmission of the mails having nothing more than an incidental relation to the question we are to decide, and are not necessary to be further considered.

Telegraph companies, in common with all other companies incorporated under said act, have unquestionably the general powers conferred by Section 3, to-wit: to sue and be sued, plead and be impleaded, defend and be defended, contract and be contracted with, acquire and convey at pleasure, all such real and personal estate as may be necessary and convenient to carry into effect the objects of the incorporation; to make and use a common seal, and the same to alter at pleasure, and do all needful acts to carry into effect the objects for which it was created, and such company shall possess all the powers, and be subject to all rules and restrictions provided by this act. This is the section to be found under that part of the act creating and regulating railroad companies, but, as I before stated, the power to enter on land, make appropriations, &c., is contained in section ten. When, in that part of the act creating Telegrah Companies, we examine for their powers, we only find a reference to the general corporate powers above mentioned. These are powers conferred on churches, schools, and almost every specie of corporations, which it will not be claimed possesses this power of eminent domain, but we fail to find, in the telegraph portion of the act, the power to condemn property. I, therefore, feel compelled to refuse the plaintiffs the relief asked in this case. The petition will be dismissed.

—The Michigan Central road earned the 2d week in January:

| | |
|---|---|
| 1864 | $63,690 |
| 1865 | 67,094 |
| Increase | $3,404 |

—The Rock Island road in the same week gained $16,000.

—The Toledo and Wabash Railway earned the first week in February:

| | |
|---|---|
| 1865 | $35,435 60 |
| 1864 | 20,931 71 |
| Increase | $14,503 88 |

## MONETARY AND COMMERCIAL.

Since we wrote our last article on monetary affairs, events have occurred which are likely to have a great influence on future financial as well as military affairs. General Sherman has traversed a large part of South California, taking its capital and principal railroads, thus cutting off the main rebel army from its principal support and resources. At the same time Charleston, so long the great rebel stronghold, has also fallen, and the glorious old flag of the Union waves over Fort Sumter! In addition to all this, we have just heard of the fall of Fort Anderson, the main defense of Wilmington. Such events as these so favorable to the success of the Government, so surely the forerunners of the period, when all commercial affairs will settle down, could not occur without having great influence on all the markets. Precisely how great the effect will be, we can not now tell; especially as we seem likely to have a continuation of such successes.

Gold has fallen very decidedly; but perhaps not as much as many expected. Gold, as we have said before, depends for its price in current money, mainly on the relation of *supply and demand.* Yet it is true, that military successes, by occasioning a belief that exchanges must soon settle down on a gold bases, do lower the price sensibly.

The daily fluctuations in the New York market during the week have been as follows:

| | Opening. | Highest | Lowest. | Closing |
|---|---|---|---|---|
| Feb. 16 | 203½ | 204⅝ | 203¼ | 204⅝ |
| " 17 | 203½ | 204⅝ | 203½ | 204 |
| " 18 | 204 | 205⅝ | 204 | 204¼ |
| " 20 | 202 | 202 | 198¾ | 200 |
| " 21. | 197½ | | 196½ | 199⅜ |

The 22nd being a Holiday in New York, we have no later quotations. If military successes continue gold must fall still lower; yet, in view of the probable fact that (as we suppose will be the case) importations will largely increase in the Spring months, there will be a greater demand for gold, and we should not be surprised to find it moderately rising, though it can not attain the high price it held last summer and autumn.

The usual quotations for exchange are:

| | Buying. | Selling. |
|---|---|---|
| New York | 50@75 ℘ M. | ¼ prem |
| Philadelphia | 50@75 ℘ M. | ⅛ prem |
| Boston | 50@75 ℘ M. | ⅛ prem |
| Baltimore | 1-10 dis. | par |
| Gold | 96@97 prem. | 100 prem |
| Silver | 81@83 prem. | 90 prem |

The *Price Current* remarks that:

"Business has been rather dull, though there has been moderate activity in some departments; but with the exception of a demand which arose for bulk sides and lard for the English markets about the middle of the week, we may say the markets have been generally dull, and at the close yesterday, prices of all articles tended downward, the decline in gold having taken away what firmness or confidence which had existed previously."

Money has been and is still close; currency running low in the banks, and the rate of interest high. For this there are two good reasons, 1. There is an immense amount of pork and produce held in Cincinnati, and which has not gone to market, and for which there are no returns; 2. The Government is behind head for payments to quartermasters and commissioners. This deficiency, however, will be made up, and we are told that currency will be more abundant.

In conclusion, we may say that there is good reason to believe the rebellion is drawing rapidly to its close, and when that is ended all branches will look up—currency become more stable—prices lower, and we think a period of great prosperity is approaching.

—The *Fishkill Journal* says that work will commence on that section of the Hudson River and Erie Railroad in April, and that the cars will probably be running through Fishkill village by the Summer of 1866.

—The Franklin branch of the Atlantic and Great Western Railway has been completed to Oil City.

—The Racine and Mississippi road earned the first week in February:

| | |
|---|---|
| 1864 | $8,411 |
| 1865 | 8,013 |
| Decrease | $398 |


WRIGHTSON & CO.

BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO.


## CHANGE OF TIME.

## Indianapolis and Cincinnati

THREE THROUGH TRAINS DAILY, as follows:

| | Leave. | Arrive. |
|---|---|---|
| St. Louis and Chicago Express | 6.30 A. M. | 10.15 A. M. |
| Springfield & St. Joseph Express | 1.00 P. M. | 5.00 P. M. |
| St. Louis & Chicago Express | 4.00 P. M. | 1.30 A. M |

Sleeping cars by this train for St. Louis and Chicago

ACCOMMODATION TRAINS.

| | Leave. | Arrive. |
|---|---|---|
| Lawrenceburg Accommodation | 4.25 P. M | 8.35 A. M. |
| Harrison | 9.00 A. M. | 3.00 P. M. |

Through Tickets can be obtained at the Spencer House, Burnet House and Gibson House Offices, and at the Depot

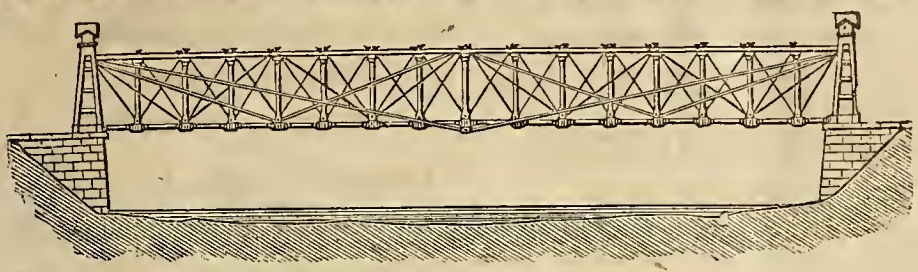
☞ Passenger Depot corner of Pearl and John streets, is within a few squares of all the principal Hotels in the city.

ROBERT MEEK, Supt.

## General Ticket Agents of the Principal Railroads.

| | | | |
|---|---|---|---|
| Atlantic & Great Western Railway | T. H. Goodman, | General Ticket Agent, | Meadville, a. |
| Buffalo & Erie | J. A. Burch, | General Ticket Agent, | Buffalo, N. Y. |
| Buffalo & New York & Erie | Wm L. Doyle | " " " | Buffalo, N. Y. |
| Buffalo & Lake Huron | Thos. W Bussell, | " " " | Brantford, C. W. |
| Burlington & Missouri River Railway | L. Carper, | " " " | Burlington, Iowa, |
| Boston & Worcester | L. K. Miles, | " " " | Boston, Mass |
| Bellefontaine Railway Line | Chas. Wood, | Gen. Ticket Agent, | Terre Ha te, Ind |
| Boston & Providence | James Dailey, | Ticket Agent, | Boston, Mass. |
| Baltimore & Ohio | L. M Cole | " | Baltimore, Md. |
| Bost. Concord & Mont. and Wh. M | J. L. Rogers, | " | Plymouth, N H. |
| Chicago, Mil., LaCrosse & St. Paul | A. V. H. Carpenter, | Gen Ticket Agent, | Milwaukee Wis. |
| Chicago, Burlington & Quincy | Samuel Powell, | General Ticket Agent, | Chicago, Ill. |
| Chicago & R. Island and Miss. & Mo | W. L. St. John, | " " " | Chicago, Ill. |
| Chicago, Alton & St. Louis | Joseph Price, | Treasurer, | Chicago, Ill. |
| Chicago & North Western | E. P. Cutler, | General Ticket Agent, | Chicago, Ill. |
| Connecticut & Passumpsic Rivers | Nathaniel P. Lovering, | " " " | St. Johnsbury, Vt. |
| Chicago, Iowa & Nebraska | Jas. M. Ham, | General Passenger Agent, | Clinton, Iowa, |
| Central Railway of New Jersey | H. P Baldwin, | General Ticket Agent, | 69 Wall Street, N. Y. |
| Catawissa Railway Co. | H. H. McDonnell, | Freight and Passenger Accountant, | Philadelphia, Pa. |
| Central Ohio | John W. Brown, | General Ticket Agent, | Columbus, Ohio. |
| Columbus & Indianapolis R R. | F. Chandler, | " " " | Indianapolis, Ind. |
| Cincinnati & Zanesville | E. S. Lowe. | " " " | Cincinnati " |
| Cincinnati & Chicago Air-Line | L. H. Walkley, | " " " | Richmond. Ind |
| Cheshire | R. Stewart, | " " " | Keene, N. H. |
| Connecticut River Railway | E. Morgan | " " " | Springfield, Mass. |
| Cleveland, Painesville & Ashtabula | J. W. Cary, | " " " | Cleveland, Ohio. |
| Cleveland & Pittsburg | F R. Myers. | " " " | " " |
| Cleveland & Toledo | John U. Parsons, | " " " | " " |
| Cleveland, Columbus & Cincinnati | H C. Marshall, | " " " | " " |
| Cincinnati, Hamilton & Dayton | P. W. Strader. | " " " | Cincinnati. " |
| Concord, Manchester & Lawrence | Geo. G. Sanborn, | " " " | Concord N. H. |
| Dayton & Michigan | P. W. Strader, | " " " | Cincinnati, Ohio. |
| Dubuque, & South-Western | Geo. W. Farley, | Receiver, | Dubuque Inwa. |
| Dubuque & Sioux City | J. A. Pinto, | General Ticket Agent. | Dubuque, Iowa. |
| Detroit & Milwaukee | Jas. H. Muir, | Auditor, | Detroit, Mich. |
| Erie Railway | Wm. R. Barr | General Passenger Agent. | New York. |
| Eaton & Hamilton | E. W. McGuire, | General Ticket Agent, | Eaton, Ohio |
| Evansville & Crawfordsville | J. E. Martin, | Secretary, | Evansville, Ind. |
| Elmira & Williamsport | Edmund B Smith. | General Ticket Agent. | Elmira, N. Y |
| East Pennsylvania | Philip M. Ermentrout, | " " " | Reading, Pa. |
| Erie & Pittsburg | J A Burch, | " " " | Buffalo, N. Y. |
| Fitchburg Railway | H. F. Whitcomb, | " " " | Boston, Mass |
| Great Central Railway Line | F. Chandler, | General Ticket Agent, | Indianapolis, Ind, |
| Great Western Railway (Canada) | J. Charlton, | Auditor, | Hamilton. C. W. |
| Great Western Railway Co of 1859 | W. D Richardson, | General Ticket Agent, | Springfield, Ill |
| Grand Trunk Railway (Canada) | Henry Shackell, | Auditor, | Montreal, C. E |
| Hudson River Railway | C. H. Kendrick, | General Ticket Agent. | New York. |
| Hannibal & St. Joseph | P. B. Groat, | " " " | Hannibal, Mo |
| Indianapolis & Cincinnati | F. B. Lord, | " " " | Indianapolis, Ind. |
| Indianapolis, Peru & Chicago | V. T. Malott, | Treasurer, | Indianapolis, Ind |
| Illinois Central | Wm. P. Johnson, | General Passenger Agent, | Chicago, Ill. |
| Indiana Central | F. Chandler, | General Ticket Agent, | Indianapolis, Ind. |
| Jeffersonville | Jas. Ferrier | " " " | Jeffersonville, Ind. |
| Kentucky Central | H. P. Ransom, | General Ticket Agent. | Covington. Ky. |
| Keokuk, Ft. Des Moines & Minn | John Givin, | " " " | Keokuk, Iowa. |
| Little Miami and Columbus & Xenia | P. W. Strader | " " " | Cincinnati, Ohio. |
| Logansport, Peoria & Burlington | E. M. Whitlock, | Chief Clerk, | Peoria, Ill. |
| La Crosse & Milwaukee | J M. Kimball, | General Ticket Agent, | Milwaukee, Wis. |
| Louisv. & Frankfort and Lex. & F | Henry Steffee, | General Freight and Ticket Agent, | Louisville, K |
| Lafayette & Indianapolis | John M Kerper, | General Ticket Agent, | Lafayette, Ind. |
| Louisville, New Albany & Chicago | J. G. Williamson, | " " " | New Albany, Ind |
| Louisville & Nashville | D. A. Kean, | Chief Clerk. | Louisville, Ky. |
| Michigan Central | Thos. Frazer, | General Ticket Agent, | Detroit, Mich. |
| Mich. Southern & Northern Indiana | C. P. Leland, | " " " | Toledo, Ohio. |
| Milwaukee & Prairie du Chien | E. P. Bacon, | " " " | " " |
| Milwaukee & St. Paul | F. W Spear, | General Ticket Agent | Milwaukee, Wis. |
| Marietta & Cincinnati | Chas. F. Low, | General Ticket Agent, | Chillicothe, Ohio. |
| Montreal & Champlain | J. F. Barnard, | " " " | Montreal, C. E. |
| New York Central | E. F. Folger, | Chief Clerk, | Albany, New York. |
| New York, Harlem & Albany | R R. Freeman, | General Ticket Agent, | New York. |
| Norwich & Worcester | Edward T. Clapp, | Secretary, | Norwich. Conn. |
| Northern Central | Edward S. Young, | General Ticket Agent, | Baltimore, Md. |
| New York & New Haven | Jacob Mendel, | " " " | New York. |
| New Haven & Northampton | E. A Ray, | Superintendent and Clerk, | Westfield M |
| North Missouri | Jas. H. Concannon, | General Ticket Agent, | St. Louis, Mo. |
| Northern (N. H.) | A. C. Warren, | " " " | Concord, N. H. |
| N. Haven, N. London & Stonington | Wm. T. Bartlett. | " " " | New Haven, Conn. |
| North Pennsylvania | Ellis Clark, | " " " | Philadelphia Pa |
| Northern New York | Marshall Conant, | " " " | Malone, N. Y. |
| Ohio & Mississippi | Chas. E. Follett, | " " " | Cincinnati, Ohio. |
| Philadelphia & Reading | John Welch, | General Ticket Agent, | Philadelphia, Pa. |
| Pennsylvania Railroad | H W. Gwinner, | " " " | " " |
| Pittsburg, Columbus & Cincinnati | Ira A. Hutchinson, | General Ticket Agent, | Columbus, Ohio |
| Pittsburg, Fort Wayne & Chicago | H. R. Payson | " " " | Pittsburg, Pa. |
| Pacific Railway, of Missouri | E. W. Wallace, | General Ticket Agent, | St. Louis, Mo. |
| Philadelphia, Wilmington & Balt. | Geo. A. Dadmun, | " " " | Philadelphia, Pa. |
| People's Line of Steamers (N. Y. | John C. Hewitt, | " " " | New York. |
| Providence & Worcester | Wm. M. Durfee, | " " " | Providence, R I. |
| Portland, Saco & Portsmouth | Eliphalet Nott, | Treasurer, | Portland. Me. |
| Quincy & Toledo | W. D. Richardson, | General Ticket Agent, | Springfield. Ill. |
| Racine & Mississippi | R. C. Tate, | " " " | Racine, Wis. |
| Rutland & Washington | John McKeogh, | " " " | Rutland, Vt. |
| Rutland & Burlington | Wm. A. Burnett | " " " | " " |
| Rome, Watertown & Ogdensburg | H. T. Frary, | " " " | Watertown, N. Y. |
| Rensselaer & Saratoga | O. N. Crandall, | " " " | Troy, N. Y. |
| Sandusky, Dayton & Cincinnati | J. M. Webster, | " " " | Sandusky, Ohio. |
| Sandusky, Mansfield & Newark | H. M. Bronson, | " " " | " " |
| Saratoga & Whitehall | J. H. Sternbergh, | " " " | Sarotoga Springs, N |
| The United States Mail Line Co | Thos. Sherlock, | Treasurer, | Cincinnati, Ohio. |
| Terre Haute, Alton & St. Louis | Jas. B Ralston, | General Ticket Agent, | St. Louis, Mo. |
| Terre Haute & Richmond | Chas Wood, | Secretary, | Terre Haute, Ind. |
| Troy & Boston | C. W. Moseley, | General Ticket Agent, | Troy, N. Y. |
| Toledo & Wabash | J. E. Carpenter, | Cashier, | Toledo, Ohio. |
| Vt. & Can., Vt. Central, and Sullivan | H. H. Locklin, | General Ticket Agent, | St. Albans, Vt. |
| Western (Mass.) Railway | M. Griggs, | " " " | Springfield, Mass |
| Worcester & Nashua | M. Wilder, | " " " | Worcester, Mass. |

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '53. 1y. Letter Box, 1292. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets ing, sch Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27 1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Loc[illegible]

419 y 1

---

## KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA

---

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

## FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

Manner, at the Shortest, and on the

Most Reasonable Terms.

---

Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

MACHINE SHOP

SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

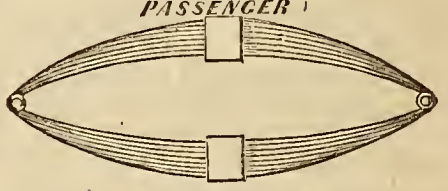
RAILWAY SPRINGS.

**FREIGHT**

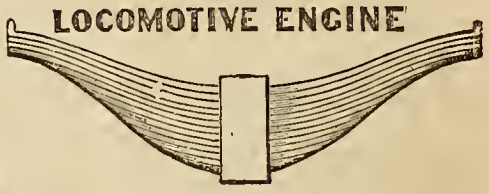




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS.**

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

No. 47 West Front St., CINCINNATI, O.

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

**W. H. F. HEWSON,**

## STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimor*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A. M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A. M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots, East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph, Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M. & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street

C. E. FOLLETT,
General Ticket Agent.

W. D. GRISWOLD, General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 3:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Sept. 2. MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY.

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

Engine and Car Axles, Pump and Piston Rods

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

THE SCHENECTADY

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—2½ to 24 inches in diameter, and branches for same, &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!!**

## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11.30 P. M. night.

On Sundays, 4.30 A. M.; 11.30 P. M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M. (Express).

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West

WM. STEARNS, Supt.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, MARCH 2, 1865

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING*,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| *Little Miami—* | *Depart.* | *Arrive.* |
|---|---|---|
| Cincinnati Express | 6.00 A. M. | 7.30 P. M. |
| Mail | 9.00 A. M. | 8.15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11.30 A. M. |
| Morrow Accommodation | 6.20 P. M | 8.00 A. M. |
| Night Express | 10.00 P. M | 10.05 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky Mail | 7.00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9.45 P. M. |
| Cin. & Chicago Air Line Express | 7.00 A. M. | 9.45 P. M. |
| Dayton Accommodation | 2.20 P. M. | 5.45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5.00 P. M. | 10 20 A. M. |
| Cin & Chicago Air Line Express | 7.40 P. M. | 12.35 P. M. |
| Hamilton Accommodation | 7.00 P. M | 8.05 A. M. |
| do do | 10.00 A. M. | 6.45 A. M |
| *Marietta & Cincinnati—* | | |
| Mail Express | 7.40 A. M. | 7 00 P. M. |
| Chillicothe Accommodation | 3.30 P. M. | 11.30 A. M. |
| *Ohio & Mississippi—* | | |
| Louisville, St. Louis and Cairo Mail | 7.00 A. M. | 11 30 P. M. |
| St. Louis and Cairo Express | 5.00 P. M. | 5.00 A. M. |
| Louisville, St. Louis and Cairo Express | 7 40 P. M. | 8.20 A. M. |
| *Indianapolis & Cincinnati—* | | |
| St. Louis and Chicago Express | 6.30 A. M. | 11.00 A. M. |
| Mail | 1.00 P. M. | 5.00 P. M. |
| Night Express | 4 00 P. M. | 1.70 A. M |
| Lawrenceburg Accommodation | 4.25 P. M. | 8.35 A. M. |
| Harrison Accommodation | 9.00 A. M. | 3.00 P. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Morning Express | 9 00 A. M. | 7.30 P. M. |
| Accommodation | 4.00 P. M. | 8.05 A. M. |
| *Kentucky Central,—* (City time.) | | |
| First Train | 6.00 A. M. | 10.40 A. M. |
| Second Train | 2.00 P. M. | 8 00 P. M |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## THE NORTHERN PACIFIC R. R.

We have, in a former number, given a digest of a statement made to the Nevada Legislature, in relation to the Pacific Railroad—the western bounds of which is to terminate at San Francisco, California. We have now before us the proceedings of the organization of the "Northern Pacific Railroad Company." This Company has a direct Charter from Congress, to make a Railroad from the western end of Lake Superior to Puget Sound. On examination of this Charter, and the proceedings under it—we confess that we are astonished, at the eminent value of the grant—and the advantages conferred upon the Stockholders.. In order to present the matter fairly, we shall give an analyses of the Charter, and proceedings under it. The Act incorporating this Company was passed by Congress, and approved by Mr. Lincoln, July 2d, 1864.

*Section 1st.* Appoints, and constitutes into a body corporate, a certain number of Commissioners, under the name of the "Northern Pacific Railroad Company;" and that whenever (within six months)—the said Commissioners shall have appointed a meeting, and formed a subscription of *twenty thousand shares*, and received a *bone fide* payment of $10.00 on each share ($200,000)—a meeting to choose Thirteen Directors, and thereafter said Stockholders, shall constitute the body politic.

*Section 2d*, Confers upon said Company the *right of way*, through Public Lands 200 feet in width, with all necessary ground for stations, buildings, workshops, &c., &c., with all stone, and material necessary to construct the road.

*Section 3d*, Confers the Land Grant, &c., as follows: "every alternate section (600 acres)—of public land, not mineral, designated by odd numbers to the amount of twenty alternate sections per mile, on each side of said railroad line, as said company may adopt, through the Territories of the United States, and ten alternate sections of land per mile on each side of said railroad, whenever it passes through any State, and whenever, on the line thereof, the United States have full title, not reserved, sold, granted, or otherwise appropriated, and free from pre-emption, or other claims or rights, at the time the line of said road is definitely fixed, and a plat thereof filed in the office of the Commissioner of the General Land Office; and whenever, prior to said time, any of said sections, or parts of sections, shall have been granted, sold, reserved, occupied by homestead settlers, or pre-empted or otherwise disposed of, other lands shall be selected by said company in lieu thereof, under the direction of the Secretary of the Interior, in alternate sections and designated by odd numbers, not more than ten miles beyond the limits of said alternate sections: Provided, That if said route shall be found upon the line of any other railroad route, to aid in the construction of which lands have been heretofore granted by the United States, as far as the routes are upon the same general line, the amount of land heretofore granted shall be deducted from the amount granted by this Act: Provided, further, That the railroad company receiving the previous grant of land may assign their interest to said "Northern Pacific Railroad Company," or may consolidate, confederate, and associate with said company upon the terms named in the first section of this act: Provided, further, That all mineral lands be, and the same are hereby, excluded from the operations of this Act, and in lieu thereof a like quantity of unoccupied and unappropriated agricultural lands in odd numbered sections nearest to the line of said road, and within fifty miles thereof, may be selected as above provided: and Provided, further, That the word "mineral," where it occurs in this Act, shall not be held to include iron or coal:

*Section 4th*, Provides, that whenever *twenty five miles* of the road are finished, Commissioners shall set off the land to the Company, except, in Minnesota and Wisconsin—where half the land is to be retained, till the whole road is complete.

*Section 5th*, Relates to the mode of constructing the road.

*Section 6th*, Withdraws the public lands, forty miles in breadth, on each side of the road, from sale after the route is fixed.

*Section 7th*, Relates to the condemnation of lands, and material, from individuals.

*Section 8th*, Make this grant on these conditions, viz: the road shall be *commenced, within two years*, that, at least fifty miles shall be completed per year, and the whole road shall be completed July 4th, 1867.

*Section 10th*, Provides that "all people" in the United States may subscribe.

*Section 11th*, Provides, that said road shall be a Post Route, and a Military road, and be subject to the use of the United States. The remaining sections relate to the organization, and mode of proceeding, by the Company. The Board of Commissioners held their first meeting in Boston, on the 1st of September, 1864, at that meeting the organization of the Company was completed, November 15th, the Officers appointed by the Commissioners, reported twenty thousand shares (2,000,000) subscribed, and ten dollars paid on each share. On the 6th of December, the Company was organized, by the election of Thirteen Directors. On the 15th of December, the Board accepted the Charter, and on the 29th of December, Mr. Lincoln acknowledged service on him of the acceptance of the Charter. On the 11th of January, the Constitution and By-Laws of the Company were formed, and adopted. Thus all the acts required by the Charter were complied with, and the "Northern Pacific Railroad Company" is now in full operation. This being the case, let us now

consider its advantages. Mr. Perham, (Chairman) said:

"This road, by Gov. Stevens' route, is about 1760 miles long, from the head of Lake Superior to Puget Sound; but in view of additional curves that may be required, and a branch to Portland, in the State of Oregon, he would call the distance two thousand miles. Of this distance, about 300 miles would be in the States of Wisconsin and Minnesota, leaving 1700 miles in the Territory of Oregon."

"To construct this road, Congress, by an act of the last session, made a most munificent grant of twenty square miles of land, or 12,800 acres, for each mile of the road through Wisconsin, Minnesota and Oregon, and forty square miles, or 25,600 acres, for each mile of the road through Dakota, Montana, Idaho, and Washington Territories, making an aggregate of 47,360,000 acres for the whole grant."

"These lands, when the road should be built and the business fairly started, including town and station sites, would certainly average ten dollars per acre, making the sum of $473,600,000."

"Supposing the construction of the road should cost $60,000 per mile, the entire cost at this rate would be $120,000,000, leaving to the shareholders an excess of clear profit from the lands alone of $353,600,000."

This is certainly a very glowing account of the matter, but, as the face of this country is now pretty well known; and there is a great deal of experience in selling lands—we will make another estimate, much nearer the truth. Mr. Perham's estimate would probably be near the fact, *if* the road were actually made, and the lands kept on hand—or a large part of them, for half a century. But, a very different state of things is the fact. Such a Company must, of necessity sell most of these lands at an early date, and must sell, as the Illinois Central has, its best lands first. The true mode of estimating the value of the lands is this. 1st. Except, a small portion in Wisconsin and Minnesota,—not half these lands are cultivatable; and for the residue, it will be half a century before they will be worth any notable sum,—and they may be left out of view. 2d. The other half can not be sold, with the advantages of the Railroad, at more than $5.00 per acre. The true calculation of the value of this grant then, will be this;

| | |
|---|---|
| Quantity of land..... | 47,360,000 |
| ½ Salable. ..... | 23,680,000 |
| Value, at $5 per acre..... | $118,400 000 |

But, is not this ample?—with the right of way, and the material on hand,—we have no doubt whatever, that the road may be constructed for $120,000,000; and the Land Grant be *fully equal to the cost of the road.* This is independent of the town sites, and of the half of the land, which will become valuable for timber, and portions where the country is settled. We conclude, then, that this Company will enter on its work with great advantages, and with the fair expectation of great profits on its capital.

Below, we extract from the report, some other interesting particulars, in relation to this route:

DISTANCES.

*Overland.*

"The distances from St. Paul and Lake Superior to Seattle, on Puget Sound, are respectively 1764 and 1750 miles; and from the same point to Vancouver, on the Columbia, 1717 and 1733 miles. From St. Louis *via* central route to Benicia, 2482 miles. From Memphis, *via* route of the 35th parallel, to San Francisco, 2366 miles, and from Gaines, *via* the route of the 32d parallel, to San Francisco, 2174 miles; which shows that the overland distance from Seattle or Vancouver to the Mississippi and the great lakes is much less than the distance from San Francisco to the Mississippi, either by the central, the 35th parallel, or the 32d parallel route."

*To Asia.*

| | To Seattle. | To San Francisco. | Difference in favor of Puget Sound. |
|---|---|---|---|
| From Amoor..... | 3850..... | 4110..... | 260 |
| From Shanghai.. | 5140..... | 5430..... | 300 |
| From Canton..... | 5900..... | 6140..... | 240 |
| From Calcutta... | 8730..... | 8970..... | 240 |

"Which shows Puget Sound is nearer the above ports of Asia than San Francisco by distances ranging from 240 to 300 miles, and averaging 260 miles."

"For sailing vessels the difference is practically greater, for the prevailing winds are such that vessels coming from Asia make the entrance to the Straits de Fuca on their way to San Francisco, and thus the practical distance is some seven hundred miles less to Puget Sound than to San Francisco."

THE MISSOURI AND COLUMBIA RIVERS.

"The northern route might be called the route of the Missouri and Columbia rivers. It touches the Missouri at the mouth of the Yellow-stone, and near the Great Falls; the Columbia at the head of steamboat navigation. Steamers have actually ascended the Missouri to Fort Benton, a short distance below the Great Falls, and the Columbia and Snake rivers to Priests' Rapids and the mouth of the Pelouse. These rivers are now used by the War Department as lines of transportation for troops and supplies. Troops will next month be sent in steamers to Fort Benton, and thence be despatched overland to the department of Oregon. The distance from Fort Benton to the mouth of the Pelouse is about 485 miles, and to Priests' Rapids about 560 miles. No other route presents this extraordinary engineering facility for the construction of an overland railroad; for it can be worked simultaneously in four different divisions, the extremity of each division resting on water lines, and thus the road can move on simultaneously on eight different sections; the longest division being the one from Fort Benton to the Columbia, and the longest distance of road from a single point accessible by water being less than 300 miles. On every other route the distance between water lines will be from 1500 to 2000 miles."

TRADE WITH ASIA.

"We have already shown that the northern route furnishes much the shortest line from Asia to our interior, our Atlantic ports and to Europe.'

"The trade of Asia is a trade with over six hundred millions of people, covering an area of over twelve millions of square miles. The foreign trade of China was estimated, some years since, at one hundred and twenty-five millions of dollars. Japan, with its fifty millions of people, is six thousand one hundred and sixty miles nearer England *via* the northern route than by Cape Horn; and Shanghai, the great future emporium of China, three thousand six hundred miles nearer. The shortest time will determine both the course of travel and line of movement of all costly articles of freight. The value of time in the transportation of freight is evinced by the high rates paid to clipper ships, the rapid increase of business on the steamers between New York and San Francisco, where the rates are excessively high, the movement of cotton up the Mississippi, and by rail to New England ports, and the higher rates paid for transportation by rail on lines parallel to canals and rivers. But all articles which deteriorate by exposure to a tropical climate will take the northern route across the continent. Teas, spices, furniture, silks, furs, &c., will, on this route find their way to Europe.'"

The climate on the western side of the Rocky Mountains, although in a higher latitude, is milder than that of New York and Pennsylvania. This review is sufficient, we think, to show the perfect practicability, and in future years, the incalculable importance of a Pacific Road to the unity and prosperity of this country.

## NAVAL FORCES OF UNITED STATES.

The view of the navy given below will be of interest to the reader. There never has been so large and efficient a navy built in the same time in the world; and we believe that in regard to iron vessels, the navies of Great Britain and France can not equal it. There never need be any fear of European intervention while we have such a navy:

"The subjoined statements, which we take from the Report of the Secretary of the Navy, presents a general exhibit of the navy, including vessels under construction on the 1st of December, 1864, with a comparative statement of the navy in December, 1863 and 1864.

"A tabular statement is appended of the number of navel vessels, of every class, that have been constructed, or in the course of contruction, since March 4, 1861.

GENERAL EXHIBIT OF THE NAVY, INCLUDING VESSELS UNDER CONSTRUCTION, DEC, 1864.

| Description. | No. of Vessels. | No. of guns. | No. of tons. |
|---|---|---|---|
| Screw steamers especially constructed for naval purposes | 113 | 1,426 | 169,231 |
| Paddle-wheel steamers especially constructed for naval purposes | 52 | 524 | 51,878 |
| Iron-clad vessels | 71 | 275 | 80,596 |
| Screw steamers purchased, captured, &c., fitted for naval purposes | 149 | 614 | 60,380 |
| Paddle-wheel steamers purchased, captured, &c., fitted for naval purposes | 174 | 921 | 78,762 |
| Sailing vessels of all classes | 112 | 850 | 69,549 |
| Total | 671 | 4,610 | 510,396 |

COMPARATIVE STATEMENT OF THE NAVY, DEC., 1863 and 1864.

| Description. | Vessels. | Guns. | Tonnage. |
|---|---|---|---|
| Total Navy, Dec., 1864 | 671 | 4,610 | 510,396 |
| Total Navy, Dec., 1863 | 588 | 4,443 | 467,967 |
| Actual increase for the year. | 83 | 167 | 42,429 |
| Total losses by shipwreck, in battle, capture, &c., during the year | 26 | 146 | 13,084 |
| Actual addition to the Navy from Dec., 1863, to Dec., 1864 | 209 | 313 | 55,513 |

"The following tabular statement exhibits the number and description of vessels that have been constructed, or put in the course of construction, for the navy, since the institution of active measures for the supression of the rebellion. Some of them have been built by contract; others by the Government, in the several navy yards. If we add to the number hose constructed under similar circumstances, and within the same period, that have been lost by shipwreck, in battle, &c., viz: the sloops Housatonic and Adirondack, and the iron-clads Monitor, Weehauken, Keokuk, Indianola and Tecumseh, the aggregate would be 210 vessels, 1,675 guns, and 256,755 tons.

Picket-boats, and small craft built for especial purposes, are not embraced in this statement.

VESSELS CONSTRUCTED FOR THE NAVY SINCE MARCH 4, 1861.

| Description. | Vessels. | Guns. | Tonnage. |
|---|---|---|---|
| Screw sloops, Ammonoosuc class, 17 to 19 guns, 3,213 to 3,713 tons each | 7 | 121 | 23 637 |
| Screw sloop Idaho, 8 guns and 2,638 tons | 1 | 8 | 2,638 |
| Screw sloops, spar deck, Java class, 25 guns and 3,177 tons each | 8 | 200 | 25,416 |
| Screw sloops, spar deck, Hassalo class, 25 guns and 3,365 tons each | 2 | 50 | 6,730 |
| Screw sloops, clippers, single deck, Contoocook class, 13 guns and 2 348 tons each | 10 | 130 | 23,480 |
| Screw sloops, Kearsarge class, 6 to 12 guns, and averaging 1,023 tons each | 4 | 40 | 4,092 |
| Screw sloops, Shenandoah class, 8 to 16 guns, and 1,367 to 1,533 tons each | 6 | 74 | 8,584 |
| Screw sloops, Ossipee class, 10 to 13 guns, and 1,240 tons each | 2 | 23 | 2,480 |
| Screw sloops, Serapis class, 12 guns and 1,380 tons each | 8 | 96 | 11,040 |
| Screw sloops, Resaca class, 8 guns and 831 to 900 tons each | 4 | 32 | 3,462 |
| Screw sloops, Nipsic class, 7 and 12 guns, and 593 tons each | 8 | 71 | 4,744 |
| Screw gunboats, Unadilla class, 4 to 7 guns, and 507 tons each | 23 | 123 | 11,661 |
| Screw tugs, Pinta class, 2 guns 350 tons each | 7 | 18 | 3,150 |
| Screw tugs, Pilgrim class, 2 guns and 170 tons each | 2 | 4 | 340 |
| Paddle-wheel steamers, double-enders, Octorara class, 7 to 11 guns, and 730 to 955 tons each | 13 | 98 | 11,024 |
| Paddle-wheel steamers, double-enders, Sassacus class, 10 to 14 guns and 974 tons each | 26 | 272 | 25,324 |
| Paddle-wheel steamers, of iron, double enders, Mohongo class, 10 guns and 1,030 tons each | 7 | 70 | 7,220 |
| Paddle-wheel steamer, of iron, double ender, Wateree, 12 guns and 974 tons | 1 | 12 | 974 |
| Total | 141 | 1,442 | 175,987 |

IRON-CLAD VESSELS.

| | | | |
|---|---|---|---|
| Sea-going casemated vessels, Dunderberg and New-Iron sides | 2 | 23 | 8,576 |
| Sea-going turret vessels, Dictator and Roanoke | 3 | 12 | 9,733 |
| Double-turret vessels, Kalamazoo class, 4 guns and 3,200 tons each | 4 | 16 | 12,800 |
| Double-turret vessels, Monadnock class, 4 guns and 1,564 tons each | 4 | 16 | 6,256 |
| Double-turret vessel, Onondaga, 4 guns and 1,250 tons | 1 | 4 | 1,250 |
| Double-turret veesels, Winnebago class, 4 guns and 970 tons each | 4 | 16 | 3,880 |
| Single-turret vessels, Canonicus class, 2 guns and 1,034 tons each | 8 | 16 | 8,272 |
| Single-turret vessels, Passaic class, 2 to 4 guns and 844 tons each | 9 | 21 | 7,596 |
| Single turret vessels, Yazoo class, 1 to 2 guns and 614 tons each | 20 | 35 | 12,280 |
| Single turret vessels, Sandusky and Marietta, 2 guns each | 2 | 4 | 953 |
| Single-turret vessels, Ozark, Neosho and Osage, 2 to 7 guns each | 3 | 13 | 1,624 |
| Casemated vessels, Tuscumbia and Chillicothe, 5 and 3 guns respectively | 2 | 8 | 768 |
| | 62 | 189 | 73,988 |
| Total | 203 | 1,631 | 249,974 |

CONSTRUCTION OF NAVAL VESSELS.

"At the commencement of the rebellion the navy consisted of sailing vessels, a few paddle-wheel steamers, and screw vessels with auxiliary steam power. Among the latter, the principal and most important were the steam frigates, which, on account of their great draught of water, were unsuitable for any other purpose than that of cruisers on foreign stations as flag-ships, for which indeed they were intended. These vessels had been built to meet the conditions of the day; some of them, the Mississippi for instance, had been in service more than twenty years. When constructed, the principal object in view was armament, not speed, and they were equal, if not superior, to the vessels of other naval Powers. For attacks on forts, when accessible to naval attacks, or to protect troops in landing, they can still render service. Time was required to repair and place in proper condition such of these vessels as were dismantled, and also those which were recalled from service abroad. The sailing men-of-war had become useless for fighting purposes. In the emergency that devolved upon it at the beginning of hostilities, the department resorted to the commercial marine, and purchased every available merchant steamer that could advantageously be converted into a naval vessel, and be used to enforce the blockade.

"The want of a class of small, heavily-armed, propeller vessels was felt, and the department immediately proceeded, on its own responsibility, and without any appropriation or authorization from Congress, to contract for the construction of twenty-three gunboats, of which the Unadilla, Pionola and Wissahickon may be taken as the type. Some of these vessels were afloat, armed and manned within four months from the date of contract, and participated in the attack on Port-Royal; others took part on the lower Mississippi, in passing the forts and in capturing New Orleans. These gunboats continue to maintain a good reputation, and their steam machinery gives satisfaction. Well adapted as they are for guarding our coast, a larger description was needed for ocean service, and four vessels of the class of the Ossipee, mounting each two guns of eleven inches, were built. There were also four vessels of slightly less tonnage constructed, carrying the same armament, of which the Kearsarge is the type. The Shenandoah is the type of six vessels, mounting each three eleven-inch guns, all of which sustain a high reputation. The heavy guns mentioned constitute the principal armament of the several classes named, but they each have in addition from two to six guns of less calibre. All of these vessels are screw steamers, suitable for sea cruising; but for shallow sounds and bays, the rivers and bayous, often narrow and tortuous, another and different class, drawing less water, was found to be necessary, and for them competition was invited. To turn in these frequently restricted channels is difficult, sometimes impossible,

and the necessities of the case suggested the principal of a fighting vessel with a double bow and rudder at each end. Twelve paddle-wheel steamers constructed on this principle were built, some in the navy yards and others by contract. The Port-Royal and the Sonoma are types of this class. An additional number, amounting to twenty seven, of these double-bowed paddle-wheel vessels have been built, almost all of them by contract. The Sassacus, which was distinguished in the attack on the rebel ram in Albemarle Sound, the Metacomet, conspicuous in Mobile Bay, and the Eutaw, are types of these vessels. Eight of this class are built of building of iron, and will have strength sufficient for sea service as well as for inland waters. One of them, the Wateree, sent round Cape Horn, reached San Francisco in September last, and is on duty in the Pacific.

"In order to have armed vessels suitable for naval operations on the Mississippi and its tributaries, the Department invited plans and propositions from ship-builders and others acquainted with those waters, and the vessels built on those rivers have been chiefly from the plans submitted by parties thus invited. Two of these vessels, built at St. Louis, participated in the action with the rebel ram Tennessee, and have done good service in Mobile Bay.

"The entire class of monitor or turreted vessels have been brought into existance during this war, and the coast and harbor iron-clads have been serviceable in James River, at Charleston, and at Mobile. Modifications and improvements have been made in this class of armored vessels.

"The pressure for iron-clads of light draught, which could ascend the rivers and penetrate the sounds and bays along our coast, was felt to be a necessity. The operations of our armies in the vacinity of the inland waters and adjacent to the rivers required the constant presence of gunboats. But the men thus employed, as well as the magazines and machinery of the vessels, are exposed, especially in the narrow streams with high and wooded banks. Some vessels, and not a few valuable lives, have been lost by these exposures, and in order to afford all possible protection to the gallant men who encounter these dangers, the Department considered it a duty to provide armored vessels of light draught for their security. Contracts were entered into for the construction of twenty vessels on the monitor principle, each to carry two 11-inch guns, in order to be efficient, and to draw seven feet of water.

"It was ascertained, however, when the first two approached completion, that their draft of water was more than was intended. The heavy armor and the two 11-inch guns, with the machinery to give them proper speed, involved the necessity of enlarging the capacity of each of them. When making these necessary alterations, it was deemed advisable, under applications from some of the commanders of squadrons for boats that should present but a small rise above the surface of the water, to dispense with the turrets in five of these light-draft vessels, with a view to special operations. The remaining fifteen were ordered to be enlarged by raising their decks, thereby giving them additional tonnage and greater draft and making them more efficient, but in other respects carrying out the original design. This is now being performed, and most of the vessels are near completion.

"The exigencies of the times and the necessities of the war have stimulated the inventive facultics of our countrymen to vast improvements in vessels, in engines, in ordnance and projectiles. That in some instances they are not at first entirely successful is not surprising. Mistakes and even failures will occur. In nearly every class of vessels that have been built, and especially those that are armored, more or less alterations have been found necessary while they were being constructed. Only two of the monitor class of vessels, the Dictator and Puritan, are proposed for sea service. Their success, of which the inventor and builder is sanguine, is among the experiments that the period and the exigencies of the country have imposed upon the department.

Four turreted vessels have been built in the navy-yard, of wood, and cased with iron—differing therein from the original monitors, which are exclusively of iron. One of them, the Monadnock, now in commission, has performed her trips from Boston to Hampton Roads with entire satisfaction, giving assurance that this experiment, deviating, in essential respects, from others, is likely to be successful. The draught of water of the Monadnock is twelve feet, and with two independent screws she has a speed of ten knots. Four other similar vessels, of a still more formidable and invulnerable character, are building.

"The only sea-going iron-clad ships, besides the two turreted vessels already mentioned, are the New-Ironsides, built in 1862; the Roanoke, one of the old frigates which has been armored, and the Dunderberg, a casemate vessel. For this vessel the contractor has promised a speed of fifteen knots at sea.

"The department has, on several occasions, invited propositions for iron, sea-going, armored ships, but Congress having declined to make the necessary appropriations, no measures have been taken for their construction.

"The vessels recently built, and at present constructing in the navy-yard, are of wood, the smaller class of them being gunboats, eight of which are of the class of the Nepsic, 600 tons, mounting one heavy pivot and four broadside guns. There are four of the class of the Nantucket, of 900 tons, mounting one heavy pivot, with six broadside guns. In addition to these, there are four vessels of the class of the Algona, with a tonnage of 1,350 tons and proportionate armament. All of these vessels have very considerable steam-power, and will, as some of them have already proved, be efficient cruisers at sea."

## RAILROAD DECISION.

RAILROAD COMPANY—DEPOSIT OF LUGGAGE.—TICKET.—SUNDAY.—REASONABLE TIME.

In the late case of Stallard against The Great Western Railway Company, in the Court of Queen's Bench, England, the complaint stated that the plaintiff was a commercial traveler, and the defendants were carriers of passengers and their luggage on a certain railway, and kept an office for receiving and safely keeping goods, being the luggage of such passengers on their railway, for reward to the defendants; that the plaintiff was such passenger, and thereupon, in consideration that he delivered to the defendants certain goods, to-wit: a case of patterns to be safely kept by the defendants, and to be redelivered by the defendants to the plaintiff, for reward to the defendants, upon request, and on the production of a certain ticket to the defendants, the defendants promised the plaintiff so to keep the case of patterns, and to redeliver the same to the plaintiff on request and on production of the ticket; that afterwards the plaintiff requested the defendants to redeliver the case of patterns to him, and produced the ticket to them, and a reasonable time for the delivery thereof elapsed after such request and production; yet the defendants did not redeliver the case of patterns to the plaintiff until a long and unreasonable time after the request and production of the ticket; and by reason of the promises, the plaintiff was obliged to wait at the defendants' office a long time for the redelivery of the case of patterns, and thereby lost and was unable to proceed by a certain train to *Sheffield*, so as to arrive there in time for a certain market, at which he had arranged to be with his case of pattern, for the purpose of showing the patterns to his customers; and was greatly damaged and injured in his business of a commercial traveler; and was to and incurred great expense in and about obtaining food and lodging for the night in *London*, and in and about endeavoring to proceed by the said train to *Sheffield*; and was otherwise greatly damaged.

The answer averred that the plaintiff did not deliver the goods, nor did the defendants promise in manner and form as alleged; that they were not guilty; and that the defendants redelivered the case to the plaintiff within a reasonable time.

On these pleadings issues were joined.

On the trial, it appeared that the plaintiff, who was a commercial traveler, arrived in London by the defeodants' railway on *Saturday* night the 5th of October, 1861; and deposited his portmanteau containing a case of patterns, at the luggage and clock office on the up platform of the *Paddington* Station, and on payment of 2*d.* received a printed ticket, on which, among others was the following:

"Left in the name of *Stallard*, and subject to the conditions on the other side.

PROSSER, Clerk,"

"This ticket to be given up when the luggage is taken away."

CONDITIONS.

"N. B.—The Great Western Railway Company appoint that the undermentioned sums be paid them for warehousing passengers' luggage, which has been, or which is about to be conveyed on their railway, viz: "For any period not exceeding three days, 2*d.*, for each package; and after three days, one penny additional for each package per day or part of a day."

(Then followed a condition limiting their liability for loss of or injury to any packages beyond the value of 5*l*, unless the value and nature were declared, and one penny per pound of the declared value paid for each day or part of a day for which the same should be left.)

"Every person depositing luggage will be furnished with a receipt, stating the number and description of the articles deposited, which receipt must be given up to the company's servants upon their delivery of the articles thereon described: and the company give notice, that they will not deliver up luggage except to persons producing the proper receipt for the respective articles claimed, which delivery shall acquit the company for all further claims in respect thereof."

"The company will not be responsible under any circumstances for loss of or injury to articles except left in the cloak room."

"The company's servants are prohibited, under pain of instant dismissal, from receiving fees or gratuities under any pretence whatever."

On *Sunday* evening, the 6th of October, the plaintiff wishing to leave London by the mail train of the *Great Northern Railway* for Sheffield, went to the *Paddington* Station at 20 minutes past 8 o'clock for his portmanteau; he found the luggage and cloak office locked, and no person in attendance After waiting some time he was told by a porter that the superintendent was on the other side; whereupon he went across to the down platform, from which the 8 P. M. train was starting, and the superintendent sent a porter with the key of the luggage and cloak office and he obtained his portmanteau. He was thus delayed 40 minutes, and by reason of that delay was too late for the train to *Sheffield* that night. There are two luggage and cloak offices at the Paddington Station, one on the up platform and the other on the down platform, which are open all day on *week days*, but on *Sundays* they are open only for about twenty minutes after the arrival and before the departure of trains respectively. The plaintiff was not aware of this arrangement; and when he left his portmanteau Saturday evening he gave no notice at what time he should want it.

The learned Judge directed the jury that though the conditions on the ticket did not mention any time at which articles left might be obtained, there was an implied contract that the defendants would have some person attending at the office at reasonable times; and he left it to them to say whether the portmanteau was, under the circumstances, delivered up to the plaintiff within a reasonable time, reserving leave to the defendants to move to enter a non suit if the Court should be of opinion that there was no evidence to be left to the jury on which they could reasonably find for the plaintiff. The jury negatived special damage, and gave a verdict for the plaintiff.

The defendants' counsel moved accordingly.

COCKBURN, J. C.—I am of opinion that there ought to be no rule. By the conditions printed on the ticket, the company have not made it part of the terms of the bailment of the portmanteau, that it should not be delivered up at any particular time on *Sunday;* on the contrary, articles left at the office are to be delivered up on the production of the ticket. Although there may necessarily be more delay in getting luggage from the office on Sunday than on other days, still the defendants were bound by the conditions to deliver up the portmanteau within a reasonable time, and whether they did so deliver it up was a question for the jury. I should not have been dissatisfied if the verdict had been for the defendants; and perhaps, if they were not precluded by the smallness of the damages from having a new trial on the ground that the verdict was against the evidence, I should have been disposed to grant that rule. The question, however, whether the person who deposits his luggage gets it back within a reasonable time, is entirely and exclusively for the jury.

CROMPTON, J.—I am of the same opinion. There was evidence to go the jury of unreasonable delay. The plaintiff sues the defendants on a bailment of a peculiar nature arising from the practice of railway companies to receive and keep luggage for their passengers, whether they intend, at a subsequent time, to travel on the same railway or on some other railway. By this ticket the defendants agree for certain reward to keep articles until they are wanted; and they must know that luggage is frequently wanted by those who deposit it for the purpose of proceeding on some other line; there was therefore an implied contract that they would be ready to deliver up the portmanteau in a reasonable time with reference to the surrounding circumstances, and of this the jury were the proper judges. It is said that the defendants were not bound to have the office open at all hours on *Sunday;* but the defendants invite persons to travel on *Sunday*, and it is notorious that persons do travel on *Sunday.* The practice of the defendants as to keeping open the office on Sunday for a short time only, can not affect the plaintiff unless he was informed of it.

BLACKBURN, J.—The proper construction of the bailment evidenced by the ticket is, that the company undertook to deliver up the portmanteau on a reasonable request and within a reasonable time. Therefore it was a question for the jury, whether there was a reasonable request by the plaintiff, and whether there was an unreasonable delay on the part of the defendants with reference to the surrounding circumstances; and they have found for the plaintiff. The grounds which my brother Crompton has mentioned, are such as the jury might have reasonably acted upon, and we can not on this motion disturb their verdict. The railway company have a simple remedy by printing on the back of the ticket that the office is open for the delivery of luggage at certain specified hours only.

MELLOR, J.—This was a question of fact for the jury, though I feel bound to say that I should have been better satisfied if their verdict had been for the defendants.

Rule refused.

## THE STATE OF NEVADA.

BARON HUMBOLDT, many years ago, speaking of what is now the State of Nevada, thus wrote of it: "The future traveler who crosses the Colorado, and pursues his way northward through the great basin lying between the Rocky Mountains on the east, and the Sierra Nevada on the west, will wonder at the immense mineral resources of the country, for this basin is one of the richest of the world."

The mines of Nevada have been worked only four years, and already their richness rival that of any other country. The property of the most successful California companies—the Ophir, Mexican, Gould & Curry, Chollar, Potosi, Savage, etc.—is located in Nevada; and when we consider that the product of the argentiferous mines of that State is officially stated to have reached $22,000,000 in 1864, it is fair to assume that Nevada is second to none in its prospects of destiny among our galaxy of stars.

When the Territory of Nevada was organized 1861, ten thousand square miles were appropriated for that purpose from the northern extremity of California, and about seventy thousand from Western Utah. Its area was, therefore, about eighty thousand square miles, the greater part of it being included in the great basin, a lofty plateau, rimmed by mountains, and the general elevation of which is about four thousand feet above the sea. Four years had hardly elapsed, when the population of the Territory increased from seven thousand to one hundred thousand, entitling it to be admitted to the Union as a State; and rapid as was the growth of California fifteen years ago, we believe that the development of Nevada is yet more rapid. Great cities and towns, even railroads, have been built; and as that new State is not subject to the fluctuations which stop the progress of some of our territories, there is no reason to doubt that its prosperity will steadily increase, Next spring large accessions to its actual population will be made, the mineral wealth of Nevada being now a well established fact, and a constant stream of emigrants from the West will line the great basin, while the California side will be invaded by settlers from the Northern and Eastern States. With the improved machinery and new appliances which come constantly into use, the miners will find their labor more remunerative, and the product of that State will soon reach a figure now hardly dreamed of.

Ten thousand claims of argentiferous veins have been already discovered in the State of Nevada. The great Comstock lode at Virginia City, of which so much has been said in the California papers, is no richer than thousands of other lodes. It has produced more than any other, because it has been more extensively worked. Many claims are worked with nearly as much profit as that renowned lode; nay, the silver-bearing strata are so rich, that no disappointment in developing them is to be apprehended, if the mines are worked with proper management and sufficient means. The veins are found of all sizes, from a few inches to ten, fifteen, and even more feet in width, and yielding from $12 to $300 per ton. As in Colorado, the deeper the veins are, the wider they become and the richer is the ore extracted.

There are in Nevada many fertile valleys; and the reputation of barrenness given it by early settlers is fast disappearing. Thousands upon thousands of acres of gold farming-land exist in the northwest and in the centre of the State, and agriculture, as in California, already proves very remunerative. The mining districts are fed, with few exceptions, from products raised in the State; and as more land is daily brought under cultivation, the miners need not apprehend the many privations which deter emigrants from other less-favored regions.

An immense basin of salt, which is of incalculable value to the inhabitants, was discovered last year, and more recently it has been stated by competent geologists that large deposits of petroleum exist in Humboldt and

some other counties. Discoveries of coal also have been made, and it really seems that all varieties of the mineral kingdom are found in abundance.

But, for a long time to come, the argentiferous leads of Nevada will constitute its principal wealth. Already Eastern capital is largely investing in those veins, and the silver mines of that new and wonderful State will soon receive the development they deserve.

## RAILROAD INTELLIGENCE.

We recently gave a full view of the Pennsylvania Railroad and its operations for 1863. The following are the principal facts in the report for 1864, just made. It will be observed that the *nett* profits of the road are $4,500,000, which is nearly 20 *per cent. nett* on its capital stock:

The capital stock of the Pennsylvania Central is $20,000,000, of which $18,529,260 are paid in. The amount of funded debt is $9,884,840, and of floating debt $771,029. Debt due the State, $6,900,500 Cost of construction and equipment, $22,813,611. The total expenses of the road for 1864, were $9,824,792, and the receipts $14,318,010. The length of the road is 354 8-10 miles, of which 335 miles are double track. It has 314 engines, 168 first-class passenger and 4,845 freight cars. The Company holds $2,741,652 worth of real estate, exclusive of roadway.

The City Engineer of St. Louis has reported on the contemplated railroad bridge across the Mississippi at that point. He estimates the expense at $3,332,200, of which the city should subscribe $1,500,000, the merchants, etc., $732,000, and the several railroads companies the balance. He thinks such a bridge would save to St. Louis annually $1,800,000. The plan he recommends is a tabular iron plate bridge, without a draw, to pass which steamboats must lower their chimneys to the hurricane deck. In addition the Chairman of the Committee on this subject appointed by the City Council, made a long report in favor of the scheme, which, with the Engineer's report, was ordered to be printed

☞ The Quicksilver Mining Company of California, (New Almaden mines,) held their annual meeting in Philadelphia yesterday, and selected the following Board of Direction for 1864: Messrs. S. G. Arnold, S. L. M. Barlow, William Bond, John A. Collier, R. H. Crittenden, James Eldridge, John Elliott, George J. Forrest, Thomas A. Scott, Howell L. Williams, and E. Waller. The statement of the profits of the company for 1864, (and November, 1863, when they come into possession,) is as follows:

| | | |
|---|---|---|
| Sales of 46,936 flasks of quicksilver for gold | | $1,775,058 |
| And for currency | | 171,539 |
| Total in gross | | $1,946,597 |
| Mining cost in gold | $645,046 | |
| Other expenses, gold | 43,574 | |
| Other expenses, currency | 30,528 | |
| Mortgage Interest, gold | 34,825 | |
| Mortgage Int, currency | 23,096 | |
| Taxes, in gold | 8,113 | |
| Taxes, in currency | 15,255 | 800,437 |
| Net (in gold) on $10,000,000 Stock | | $1,146,160 |

## RAILROADS.

We have heard recently a great many complaints of the condition of railroads, and especially of the irregularities in *tires* and the dangerous *accidents*. It will be well for roads to look into this matter. The complaints are very well expressed in the following article from the *Chicago Times*:

Bad as is the railroad system of the South, it is scarcely possible that it is much worse than that at the North. That this statement applies to all the railroads in the North, is perhaps not true; it is more especially the case with roads in the northwest, and generally such as are largely engaged in the transportation of materials for the Government.

The most observable effects in connection with the present condition of our railroads is the great increase of accidents, and the damage resulting to the business and traveling community. One scarcely takes up a newspaper, now-a-days, without finding an account of an accident resulting in a greater or less loss of life. Everywhere trains are colliding or being thrown off by broken rails, until it has become about as dangerous for a man to start on a journey by rail, as it would be for him to be in the front regiment in a charge against a rebel fort. Indeed, the chances of escape are in favor of the latter; for it is only one bullet in a good many hundreds that kills a man, which is more than can be truthfully said of railroad trains.

The damage to business interests is very great. We know of cases in which freight has been thirty five days in passing from this point to the Mississippi; and in respect to passengers, a person who succeeds in getting from Chicago to, say Dunleith, in twenty-four hours, does all that can reasonably be expected. At the present moment, so gorged is the northern terminus of the Illinois Central with produce, that shippers and other business men in that vacinity, and of Iowa, are making strenuous efforts to secure an outlet by way of Milwaukee. Shippers find themselves unable to get their produce forward in time to meet the fluctuations in the Eastern markets, nor can a merchant order any goods in this market with safety, for he has no certainty that he will get them within weeks from the time that they were ordered.

These numerous accidents, this almost universal failure to run on time, and this neglect of the interests of the business public, are, except the first named, not so much a failure as a necessity on the part of the railroads. The tracks are worn out by the tremendous pressure of Government transportation, and the same thing will account for the inability of the roads to attend promptly to private freight.

It is not easy to suggest any remedy for these difficulties. So long as the war continues, and the Government monopolizes the transportation of railroads, general business and private interests must suffer.

The public, however, has the right to demand protection in the case of life, and no railroad in any case should be held excusable where accidents result from worn out rails and rotton ties.

The fact seems to be that on almost every road there is growing a criminal disregard of human life. This must be corrected by the pressure of public opinion. No road, under any circumstances, has the right to endanger the lives of private passengers; and we are well satisfied that very rarely will accidents occur if the managers give the necessary attention to the condition and running of the roads.

## NEW JERSEY R. R. & TRANSP. CO.

The following is an abstract of the report of this company for the year ending December 31, 1864:

RECEIPTS.

| | | |
|---|---|---|
| From passengers | | $1,196,853 08 |
| From freight | | 214,214 07 |
| From U. S. mail, rents, express, freight and other sources | | 152,539 65 |
| | | $1,563,606 70 |
| Expenses | | 785,980 28 |
| | | $777,626 42 |
| Interest on bonds | $44,316 75 | |
| Transit duty on passengers and freight | 37,882 67 | |
| State tax on capital stock | 21,989 00 | |
| Government tax | 54,591 17 | |
| Loss by fire, workshop East Newark | 53,916 78 | |
| Sinking fund | 10,000 00 | |
| Dividends in cash, Aug. & Feb. | 439,775 00 | |
| Profit & loss to surplus earnings | 115,155 05 | |
| | | $777,626 42 |

The number of passengers transported over the road during the year was as follows:

| | |
|---|---|
| Over the whole of the road | 783,387½ |
| Between Jersey City and— | |
| Newark | 1,440,847 |
| Elizabeth | 319,680 |
| Rahway | 97,923½ |
| New Brunswick | 120,653 |
| Between all intermediate places | 548,449 |
| Total—not including commuters & free passengers | 3,319,940½ |

The number of tons of goods, wares and merchandise transported over the road during the year was 165,773.

The number of miles run by passenger, freight and other trains was 610,427.

GENERAL STATEMENT.

| | | |
|---|---|---|
| Capital stock | | $4,397,800 00 |
| Funded debt including $485,000, the cost of the property and privileges purchased of the Jersey Associates | | 635 000 00 |
| Floating debt | | 145,000 00 |
| Profit and loss, being surplus earnings represented by permanent improvements and the property and cash stated below | $594,542 13 | |
| Less amount paid for relaying road with new rails and other improvements | 31,777 39 | 562,764 74 |
| Dividend, 1st January, payable 1st February, 1865 | | 219,887 50 |
| | | $5,960,452 24 |
| Cost of road and equipment: | | |
| For graduation and masonry, bridges, superstructure, iron, passenger and freight stations, buildings and fixtures, engine and car houses, workshops, machinery and fixtures, engineering, land, and land damages | | $3,799,809 30 |
| Locomotives, tenders, and snow plows | | 265,796 00 |
| Cars — passenger, freight and baggage | | 226,204 00 |
| Property, viz: | | |

| | |
|---|---|
| Bridge, ferry, turnpike and other stock, real estate, ferry boats, privileges and fixtures (including the property and privileges purchased of the Jersey associates for $485,000) ..... | 1,649,021,62 |
| Cash in bank, cash items and balances due ..... | 19,621 32 |
| | $5,960,452 24 |

*President.* — ALFRED L. DENNIS. *Treasurer.*—H. J SOUTHMAYD. *Sec'y and Gen'l Sup't.*—F. WOLCOTT JACKSON.

## CALAIS & BARING RAILROAD.

The annual meeting of this company was held in Calais, Me, on the 31st of December last. The earnings during the year were:

| | |
|---|---|
| From freight from Baring..... | $13,112 37 |
| " " Milltown ..... | 7,541 07 |
| " general freight..... | 556 41 |
| " rents..... | 626 00 |
| " passengers..... | 1,495 67 |
| " Lews's Island Railroad..... | 2,148 59 |
| | $25,444 11 |
| Expenses..... | 15,716 88 |
| Net earnings..... | $9,727 23 |

The equipment of the road consists of 3 locomotives; 2 passenger, 2 baggage, 140 eight-wheel and 13 four-wheel lumber cars, 8 gravel cars, 2 hand cars, and one fourth of a snow plow. The number of miles run over the road by the company's engines, was 14-312; do., over Lewy's Island Railroad 6.005. The Lewy's Island Company's engine has run over this road 2,260 miles. Number of passengers carried 23,937. Value of materials on hand $1,600.

During the past year the total funded debt amounting to $112,700, maturing July 1st, was renewed at par, for a term of 15 years. The only new condition in the renewed bonds being the reservation each year, from the earnings, of an amount equal to 2 per cent. of the ourstanding bonds, to be invested as a sinking fund, towards retiring the bonds at maturity.

This renewal of bonds on such favorable terms is an important move for the stockholders, and it is belived that hereafter a regular annual dividend will be paid, though in seasons like the past, it may prove small.

After paying a dividend of 4 per cent., and meeting interest on the funded debt, which matured the 1st of December, and setting apart the amount due to the sinking fund up to July 1st, 1865, the Treasurer reports a small balauce in the Treasury, and no floating debt.

The following gentlemen were elected directors for the ensuing year: Geo. M. Porter, H. N. Hill, John McAdam, E A. Barnard, F. K. Swan.

At a subsequent meeting of the Board, Geo. M. Porter was elected President; Francis K. Swan, Treasurer, and James S. Cooper, Clerk.

—The statement of approximate earnings of the Marietta and Cincinnati Railroad Co., for the secoud week of February were:

| | 1865. | 1864. |
|---|---|---|
| Passengers..... | $11,725 99 | $7,095 67 |
| Freight ..... | 7,352 18 | 9,052 97 |
| Mail, exp. & telegraph | 1,194 33 | 937 58 |
| Total..... | $20,272 40 | $17,086 67 |
| Total this month to date..... | 38,098 46 | 34,538 07 |
| Commencing 1st of January..... | 146,210 06 | 99,344 47 |

## THE NEW ELECTRO-MAGNETIC LOCOMOTIVE.

An electro-magnetic locomotive which is being exhibited at Versailles is attracting much attention from the *savans* of Paris. Its inventors, M. M Louis Bellet and Charles de Rouvre, assert that locomotives on their plan could travel with ease on existing railways at the rate of two hundred kilometres, or one hundred and twenty-four miles, an hour; and an English journal reports of the small model which they exhibit that it attains an "extraordinary speed." The model is supported on four wheels, moving on a pair of iron rails of the ordinary patten. The two hindmost wheels are made of copper, and are the driving wheels. Each of them carries twenty horseshoe electro-magnets, so arranged that their poles pass through the tyre of the wheel which carries them, their polar surfaces being made even with the exterior surface of the tyre. The current by which these electro-magnets are successively magnetised is supplied by a fixed battery, carefully insulated wires proceeding from which run between the rails, and communicate by a very ingenious contrivance with the contact making and breaking apparatus of the locomotive. As contact is alternately made and so the electro-magnets, each in turn, successively magnetised and de magnetised, the iron rail attracts the polar surfaces, first of one of the electro-magnets and then of the next continually, the wheels which carry electro magnets being thus caused to revolve, and so the engine to advance. The inventors urge the employment on the ordinary railways of locomotives on this plan, for the conveyance, if not of passengers and heavy goods, at least of the mails and the lighter kind of merchandise; but, pending the discovery of some source of electricity very many times cheaper than zinc, this suggestion is scarcely likely to be acted upon even should the new locomotive, when tried on the great scale, as we hear that it is to be shortly, prove able to do all that its inventors promise. As there is no more power to be got, either as electricity or heat, out of a given weight of zinc, than can be got, as heat, out of one sixth of that weight of coal, while zinc is, moreover, weight for weight, say from thirty to forty times more costly than coal, it is obvious that, so long as the production of electricity shall invoice the consumption of zinc, or, indeed, of any body whatever dearer than coal, electro-motive engines, even if so perfectly constructed as to utilise the whole of the force developed in the batteries working them, can compete with steam-engines only for special purposes, in respect of convenience of application to which, or of special adaptation to the particular ends to be accomplished in each case, they may possess advantages over steam engines compensating for their greater cost; and it seems very questionable whether, supposing MM. Bellet and de Rouvre's locomotive to be capable of realising all their anticipations, the three advantages which are all that they claim for it—namely, the great speed at which it could travel, its freedom from all risk of running off the rails, and the diminishing wear and tear which would result from the use of a light engine not burdened with the generator of the power exerted through it, and capable of obtaining all the adhesion it needed while possessing the least weight consistent with sufficient strength in the various parts of its simple mechanism, would be at all a sufficient set-off against the enormous cost of working it,—that is, in the case of its use on the great scale, as on ordinary railways, and for traversing considerable distances. The application of it, which its inventors also suggest, to the transport, through underground tubes, of letters and light parcels from point to point of large cities, is perhaps likely to prove much more feasible.

MM Bellet and de Rouvre's locomotive resembles nearly all other electro-magnetic engines yet contrived in this, that it utilises only a small proportion of the so costly force which is developed in it. In order that a magnet, whether natural or artificial, shall exert its full attractive energy, the "pull" must be always 'direct,"—that is, the faces of the magnet and of the piece of iron with which the magnet is to be brought into contact must always, while they are being attracted together, be exactly parallel. In the locomotive just described, as in many other electro motors, this is not the case, the pull between the iron rails and the electro magnets whose polar surfaces form part of the working wheels being more or less oblique during the greater portion of the period of its continuance, with the result that by far the larger part of the magnetic force which is devoloped in them by the passage of the current is turned to no account. The attractive force of an electro-magnet acts with its full power through only so very minute a distance, that, with only one exception, so far as we know inventors of electro-magnetic engines have always found it impossible to obtain continuous, circular motion by means of "direct pull" alone. The one exception is Mr. Jacob Baynes Thompson, whose beautiful Electro-Magnetic Induction Machine, described in our columns on the 27th of May last, has recently been tried with such brilliant success on one of our telegraph lines. This gentleman has constructed an electro-motor which is a very close imitation of the human muscle. His electro-magnets are square plates of thin sheet iron, the magnetisation of which by the current is effected in a manner which is very novel and ingenious, but which we need not now stay to describe. There are four holes in each plate, one at each corner, and by means of these holes the plates are strung upon an arrangement of four horizontal rods, upon which the plates can slide backwards and forwards. When the engine is at rest, there is an interval of about one-sixteenth of an inch between each plate and the next; the moment connection with the battery is made, and the current allowed to pass, the plates all rush together, being converted one after the other into electro-magnets, and each successively attracting to itself the one next to it. There are, of course, two sets of plates, strung on two separate arrangments of rods, so that one set, say A, may undergo magnetisation, and so make a stroke, while the plates in the other set, having first been de-magnetised by the transference of the current from them to set A, are being brought back to their original positions. It is obvious that, on this plan, the obtainment of a stroke of any required length is simply a question of using a sufficiently numerous series of plates. As, by reason of its always acting directly, very nearly the whole of the attractive force developed by the current in each plate is made effective, this engine should scarcely be too costly for use where only a small amount of power is required, and where—and such cases are very numerous—a steam engine, because requiring a boiler and chimney, and needing coal, water, and attention, would be so inconvenient as to be rendered quite out of the question.—*London Mechanics' Magazine.*

☞The table of contents for last volume will be issued in an extra next week.

## PROBABLE REVOLUTION IN STEAM.

EXTRAORDINARY DISCOVERY.

In July last we referred, under this title, to an invention by Mr H. James, C. E. for a compressed air and high pressure steam engine for the economic production of motive power, and made some observations based on the opinions of those who had seen the engine in operation, as to the probability of its causing a complete revolution in the working of all kinds of machinery, remarking, at the same time, how singular it would be should it so happen that the very same individual who granted to the late George Stevenson the liberty of adopting his invention of the introduction of tubes into the boilers of his locomotive engines, as shown by an agreement between the parties, dated September 1, 1821, to render them suitable for the traction of passenger carriages, for which purpose at that period they were perfectly useless, for want of the requisite power, should now, after the lapse of 44 years, be again suggesting improvements in engines which are likely to produce a still greater revolution than before, as the present invention is applicable to every purpose where power is required, at a cost so insignificant as to eclipse everything at present known in which the combustion of fuel constitutes the active agent for its production. We are now enabled to publish some particulars of the invention, which consists in the peculiar construction and mode of working engines by the expansive force of highly compressed air, when heated by, and in conjunction with, steam of still greater pressure, such compressed air being produced and the high pressure steam introduced into the cylinders of the engines at every revolution. The engines are very similar in appearance, and in their mode of action, to that of open-topped cylinder single-stroke steam engines, only that their cranks are made of double, or even more than double, their ordinary throw or lengths, to admit of the working pistons within them, being projected by the force of the air and steam through suitable guides to any advisable distance beyond the months of the open-topped cylinders, with the double object of allowing the free escape of the air and steam after having actuated these pistons by their expansive force in one direction, and for admitting fresh atmospheric air into the cylinders, such air being then compressed by the return strokes of the pistons into appropriate vessels attached to the cylinders, or into lengthened portions of the cylinders themselves, beyond the movement of the pistons, which, during the terminal action upon the air, are made to impinge upon or strike the tail ends of inlet valves situated in the closed ends of the cylinders or vessels just mentioned, for the purpose of admitting high pressure steam into the air so compressed, the density and pressure of which air can be regulated to any desired degree by proportioning the size of the vessels or lengthened portion of the cylinders to the contents of the working cylinders themselves, for actuating by their joint expansive forces the pistons of the engine when two or more cylinders are employed for the working of each engine; or that of a single cylinder engine if preferred, but in which latter case a powerful fly-wheel will be requisite for equalizing the motion. There are a few minor details that might be entered upon, did not this exposition of the main features of the invention suffice.

A small double cylinder engine was constructed some months ago for experimental purposes, and shown at that time to several gentlemen, with the view of forming a public company—but which intention, unfortunately, was afterwards abandoned, in consequence of private offers made, which have not as yet been carried out. In the working of this engine, a small boiler is employed for supplying the steam for heating the compressed air contained in the cylinders, in the manner before described, which is also of Mr James's invention, and constructed upon the cellular principle, which gives it enormous strength, being capable of sustaining a cold water pressure of 15 tons upon the square inch; and occupying, independent of brickwork and furnace, a space of only 18 in. square by 5 in. deep; the working pressure ranging from 300 lbs. to 150 lbs. per inch; and that of the compressed air, previous to being heated, 200 lbs. per inch; the revolutions of the engine 400 per minute; and the power, as indicated by a friction dynometer, 102,488 lbs. raised 1 foot high per minute, or upwards of three horse power, at an expenditure of fuel of 10 lbs. per hour, or 3 lbs. per hour for each horse power. Now, taking into consideration the excessive friction of this engine, arising from the springing of a wooden frame to which it was temporarily attached, and with cylinders so untrue that the pistons would not compress the air within them, except when running at a very high velocity, there can be but little doubt—at all events, such is Mr. James's opinion—that when higher pressures are employed, with improved machinery upon a larger scale, the fuel may be reduced to 1 lb. per horse-power per hour, or even less. Now, supposing his opinion was correct, that it can be so reduced to 1 lb fuel, and the weight and space occupied by the engine itself proportionably decreased—which he states will be the case—the value of the invention to the public can only be estimated at millions per annum, and the most distant probability of such a consummation ought to ensure the utmost efforts for its development

As regards the action of the compressed air and steam upon the small engine, as evidenced by the effect produced by it, the elastic force of the former appears to be so intensified by the heat of the latter, that it can only be compared to that of gunpowder, the engine cylinders to small cannon, and the pistons to that of the balls, projected at the rate of 800 ft. per minute. The reports produced by the air and steam when allowed to escape suddenly into the atmosphere (which is not permitted in practice, as the noise would be objectionable), being precisely similar to those produced by the rapid discharge of small cannon or musketry.

It is considered that this very simple but important invention will result in the superseding of the present steam engine on account of its cheapness, portability, and economy, and that it will be found applicable to many novel purposes, for which the present engine is much too unwieldy, cumbersome, and expensive.—*London Mining Journal, Jan.* 14.

## AMES'S BIG GUN.

Messrs. Editors:—In reply to the inquiries of your correspondent (P. V. MacF., Jun.) on page 292 of the *American Artisan*, I would say that Mr. Ames's wrought-iron cannon *is a success.* It was fired over seven hundred times, and is *not* disabled. It was fired at an angle of thirty degrees, with the trunnions sliding on blocks of wood; the timbers being inclined at a reverse angle of four degrees. It was fired with charges *equaling twenty-five per cent. of the weight of the projectile*—a charge that no cast-iron gun in the world has stood, or can stand; one-tenth being the usual service charge. I may state that (as I am informed) the 20-inch gun was fired on its recent trial with cake powder, equivalent to but four per cent. of the weight of the projectile.

There is no question that the Ames's gun was subjected to a more severe test than was ever before applied to any gun; and it came out perfectly triumphant. The statement (made in Mr. Wiard's recent pamphlet) that the gun was disabled, is a mistake, entirely contrary to the facts. Several of the shells *burst in the gun*, owing probably to defects in the shells, or to their not being sufficiently strong for the immense force applied in them. Had it been a cast iron gun, it would most assuredly have been disabled. It is now apparently as perfect as ever, excepting some scratches caused by pieces of the broken shells, and being very slightly enlarged by the tremendous strain to which it was subjected. It was originally of seven inch caliber, but is now to be bored out to eight inches, and then fired again; after which, if it stands that test, it is to be cut open, so that the effect upon the fibers of the iron may be seen and studied.

The projectiles from the Ames's gun *were* thrown "more than seven miles;" and if the guns are not now in place to knock rebellious Richmond and the "cradle of the rebellion" into a "cocked hat," or, better still, *out of existence*, it certainly is not the fault of Mr Ames or General Butler. The former has expended about $100,000 in the enterprise, and has enough of them made, or nearly finished, to enable the Government to give the rebels at head-quarters "particular fits," *if it will only use them.* General Butler, some time since, made a requisition for some of them; whether they were furnished or not, your correspondent can not say, but I presume—judging from the manner in which Butler's requisitions for the Henry rifles and Gatling's batteries were treated—that they have not been. —*American Artisan.*

Northern Pacific Railroad Company.—The above named company is now fully organized under its charter from the present Congress; approved in July last. The Directors chosen at the stockholders' meeting are: Samuel C. Fessenden, L. D. M. Sweat, of Maine, George Briggs, Philander Reed of New York, K. B Small, of Alabama, Josiah Perham, Willard Sears, Oliver Frost, A W. Banfield, I M. Beckett, A. Abbott, Nathaniel Green, Jr., and O. Hall, of Massachusetts.

The Board of Directors organized by the choice of Josiah Perham, for President, George Briggs, for Vice President, and I. S. Withington, for Treasurer.

—The Housatonic Railroad balance sheet for 1864 is as follows:

| | | |
|---|---|---|
| Receipts from all sources | | $428,517 73 |
| Operating expenses | | $180 293 18 |
| | | $248,224 55 |
| Deduct Rent of other Roads | $74,083 17 | |
| National and State Taxes | 21,440 27 | |
| Interest | 15,348 78 | |
| | | $110,872 22 |
| Net gain | | $137,352 33 |
| From which deduct paid dividends | | 94,400 00 |
| Surplus to account of profit and loss | | $42,952 33 |

## STAMP DUTIES.

The following is an abridgment of the new Tax Law which goes into operation August 1, 1864:

AFFIDAVITS in suits or legal proceedings shall be exempt from stamp duty.

AGREEMENT or contract, &c.—for every sheet or piece of paper upon which either of the same shall be written ..... 5 cts.

BANK CHECK, draft, or order—Drawn upon any bank, banker or trust company, or for any sum exceeding $10, drawn upon any other person or persons, companies or corporations, at sight or on demand ..... 2 cts.

BILL OF EXCHANGE (Inland)—for a sum not exceeding $100 ..... 5 cts.

For every addition $100, or fractional part thereof. 5 cts.

BILL OF EXCHANGE (Foreign) or Letter of Credit—drawn in but payable out of the United States, if drawn singly or otherwise than in sets, shall pay the same rates of duty as inland bills.

If drawn in sets of three or more: for every bill of each set, where the sum made payable shall not exceed $100 ..... 2 cts.

And for every additional $100 or fractional part thereof ..... 2 cts.

BILL OF LADING or Receipt, for any merchandise or effects, to be exported from the United States to any foreign port ..... 10 cts.

BILL OF SALE, by which any ship or vessel shall be conveyed to any other person, when the consideration shall not exceed $400 ..... 50 cts.

Exceeding $500 and not exceeding $1,000 ..... $1 00

Exceeding $1,000, for every additional amount of $500 or fractional part thereof ..... 50 cts.

BOND—For indemnifying any person for the payment of any sum of money, when the money ultimately recoverable thereupon is $1 000 or less ..... 50 cts

When in excess of $1,000, for each $1,000 or fraction ..... 50 cts.

BOND for due execution of duties of office ..... $1 00

BOND of any description, other than such as may be required in legal proceedings, or used in connection with mortgage deeds, and not otherwise charged in this schedule ..... 25 cts.

CERTIFICATE of stock in any incorporated company ..... 25 cts.

CERTIFICATE of profits, showing an interest in the property of any incorporated company, if for a sum not less than $10 and not exceeding $50 ..... 10 cts.

Exceeding $50 and not exceeding $1,000 ..... 25 cts.

Exceeding $1 000 for every additional $1,000 or frartional part thereof ..... 25 cts.

CERTIFICATE.—Any certificate of damage or otherwise, issued by any port warden, marine surveyor, or other person acting as such ..... 25 cts.

CERTIFICATE of deposit of any sum of money in any bank or trust company, or with any banker, if for a sum not exceeding $100 ..... 2 cts.

For a sum exceeding $100 ..... 5 cts.

CERTIFICATE of any other description than those specified ..... 5 cts.

CHARTER-PARTY.—Contract or agreement for the charter of any ship or vessel, or steamer, between the captain, master, owner or agent, of the registered tonnage of such ship, or vessel, or steamer, does not exceed 150 tons ..... $1 00

Exceeding 150 and not exceeding 300 tons ..... $3 00

Exceeding 300 and not exceeding 600 tons ..... $5 00

Exceeding 600 tons ..... $10 00

CONTRACT.—Broker's note or memorandum of sale of merchandise, stocks, bonds exchange, notes of land, real estate or property of any kind, issued by brokers, each note or memorandum of sale ..... 10 cts.

CONVEYANCE.—Deed, whereby any lands, tenements, or other realty sold, shall be granted, assigned, &c., when the consideration or value does not exceed $500 ..... 50 cts.

When the consideration exceeds $500, and does not exceed $1 0 0 ..... $1 00

And for every additional $500, or fractional part thereof, in excess of $1 0 0 ..... 50 cts.

ENTRY of any goods wares or merchandise at any Custom House, either for consumption or warehousing, not exceeding $100 in value ..... 25 cts.

Exceeding $100 and not exceeding $500 in value..50 cts

Exceeding $500 in value ..... $1 00

ENTRY for the withdrawal of any goods or merchandise from bonded warehouse ..... 50 cts.

GAUGERS' RETURNS, if for a quantity not exceeding 500 gallons gross ..... 10 cts.

Exceeding 500 gallons gross ..... 25 cts.

INSURANCE (Life). Policy of insurance, or other instrument whereby any insurance shall be made upon any life or lives; when the amount insured shall not exceed $1,000 ..... 25 cts.

Exceeding $1000 and not exceeding $5,000 ..... 50 cts.

Exceeding $5,000 ..... $1 00

INSURANCE (Marine, Inland and Fire). Each policy of insurance, or other instrument, the premium upon which does not exceed $10 ..... 10 cts

Exceeding $10 and not exceeding $50 ..... 25 cts.

Exceeding $50 ..... 50 cts.

LEASE, Agreement or Contract for the hire, use or rent of any land, tenement, or portion thereof, where the rent or rental value is $300 per annum or less ..... 50 cts.

Where the rent or rental value exceeds the sum of $300 per annum, for each additional $300 or fractional part thereof in excess of $300 ..... 50 cts.

MANIFEST for Custom House entry or clearance of the cargo of any ship, vessel or steamer for any foreign port: if the registered tonnage of such ship, vessel or steamer does not exceed three hundred tons $1 00

Exceeding three hundred tons and not exceeding six hundred tons ..... $2 00

Exceeding six hundred tons ..... $5 00

MEASURERS' RETURNS, if for a quantity not exceeding 1,000 bushels ..... 10 cts.

Exceeding 1,000 bushels ..... 25 cts.

MORTGAGE of lands, estate or property, real or personal, heritable or movable whats ever, or any personal bond as security for the payment of any definite or certain sum of money exceeding $100 and not exceeding $500 ..... 50 cts.

Exceeding $500 and not exceeding $1 000 ..... $1 00

And for every additional $500 or fractional part thereof in excess of $1 000 ..... 50 cts.

*Provided*, That upon each and every assignment or transfer of a mortgage, lease, or policy of insurance, or the renewal or continuance of any agreement, contract or charter, by letter or otherwise, a stamp duty shall be required and paid equal to that imposed on the original instrument.

PASSAGE TICKET by any vessel from a port in the United States to a foreign port, not exceeding $35 ..... 50 cts.

Exceeding $35 and not exceeding $50 ..... $1 00

And for every additional $50 or fractional part thereof in excess of $50 ..... $1 00

POWER OF ATTORNEY ..... 25 cts.

Power of Attorney or proxy for voting at any election for officers of any incorporated company.... 10 cts.

Power of Attorney to sell and convey real estate, or to rent or lease the same ..... $1 00

PROBATE OF WILL, or Letters of Administration: where the estate and effects for and in respect of which such probate or letters of administration applied for shall be sworn or declared not to exceed the value of $2,000 ..... $1 00

Exceeding $2 0 0, for every additional $1,000 or fractional part thereof in excess of $2,000 ..... 50 cts.

PROTEST.—Upon the protest of every note, bill of exchange, acceptance, check or draft, or any marine protest ..... 25 cts.

WAREHOUSE RECEIPTS for property, goods, wares or merchandise, not otherwise provided for in any public or private warehouse, when the property or goods so deposited or stored shall not exceed in value $500 ..... 10 cts.

Exceeding in value $500 and not exceeding $1,000.20 cts.

Exceeding in value $1,000, for every additional $1 000 ..... 10 cts.

RECEIPTS for the payment of any sum of moneys or debt due exceeding $20, not being for satisfaction of any mortgage or judgment or decree of court, and a receipt for the delivery of any property ..... 2 cts.

WAREHOUSE RECEIPT for any goods, merchandise, or property of any kind, not otherwise provided for, held on storage in any public or private warehouse or yard ..... 25 cts.

WEIGHERS' RETURNS, if for a weight not exceeding five thousand pounds ..... 10 cts.

Exceeding five thousand pounds ..... 25 cts.

WRIT, or other original process by which any suit is commenced in any court of record ..... 50 cts.

Where the amount claimed in a writ issued by a court not of record, is $ 00 or over ..... 50 cts.

Upon every confession of judgment, cognovit, for $100 or over (except in those cases where the tax for the writ of a commencement of a suit has been paid 50 cts.

Writs or other process on appeals from justice courts or other courts of an inferior jurisdiction to a court of record ..... 50 cts.

WARRANT OF DISTRESS, when the amount of rent claimed does not exceed $100 ..... 25 cts.

When the amount claimed exceeds $100 ..... 50 cts.

*Provided* That no writ summons or other process issued by and returnable to a Justice of the Peace, except as hereinbefore provided, or by any police or municipal court having no larger jurisdiction as to the amount of damages it may render than a Justice of the Peace in the same State, or issued in any criminal or other suits commenced by the United States or any State, shall be subject to the payment of stamp duties; *and provided further*, that the stamp duties imposed by the schedule B on manifests, bills of lading and passage tickets, shall not apply to steamboats or other vessels plying between ports of the United States and ports in British North America.

### MEDICINES OR PREPARATIONS.

For and upon every packet, box, bottle, pot, phial or other inclosure, where such packet, box, bottle, pot, phial or other inclosure, with its contents, shall not exceed, at the retail price or value, the sum of 25 cents ..... 1 ct.

Exceeding 25 and not exceeding 50 cents ..... 2 cts

Exceeding 50 and not exceeding 75 cents ..... 3 cts.

Exceeding 75 cents and not exceeding $1 ..... 4 cts.

Where such packet, box bottle or other inclosure, with its contents, shall exceed the retail price of $1. for each and every 50 cents or fractional part thereof over and above the $1, an additional ..... 2 cts.

For and upon every packet, box, bottle or other inclosure, containing any essence, extract, toilet water, cosmetic, hair oil, pomade, hair dressing, hair restorative, hair dye, tooth wash, dentifrice, tooth paste, aromatic cachous, or any similar articles, by whatsoever name the same heretofore have been, now are, or hereafter be called, where such packet, box, bottle or other inclosure, with its contents, shall not exceed, at the retail price, the sum of 25 cents ..... 1 ct

Exceeding 25 and not exceeding 50 cents ..... 2 cts

Exceeding 50 and not exceeding 75 cents ..... 3 cts

Exceeding 75 cents and not exceeding $1 ..... 4 cts

Photographs, ambrotypes, daguerreotypes or any sun picture, except as hereinbefore provided—upon each and every picture of which the retail price shall not exceed 25 cents ..... 2 cts.

Exceeding the retail price of 25 cents and not exceeding the sum of 50 cents ..... 3 cts.

Exceeding the retail price of 50 cents and not exceeding $1 ..... 5 ts.

Exceeding the retail price of $1, for every additional dollar or fractional part thereof ..... 5 cts.

Playing Cards.—For and upon every pack of whatever number, when the retail price per pack does not exceed 15 cents ..... 2 cts.

Exceeding the retail price of 15 cents and not exceeding 25 cents per pack ..... 4 cts.

Exceeding the retail price of 25 cents and not exceeding 50 cents per pack ..... 10 cts.

Exceeding the retail price of 50 cents and not exceeding $1 per pack ..... 15 cts.

Exceeding the retail price of $1, for every addition $150 cents or fractional part thereof, in excess of $1 ..... 5 cts

Where such packet, box bottle or other inclosure, with its contents, shall exceed the retail price of $1, for each and every 50 cents, or fractional part thereof over and above the $1, additional ..... 2 cts.

Friction or lucifer matches, for each parcel or package ..... 1 ct.

When in parcels or packages containing more than one hundred and not less than two hundred matches, for each parcel or package ..... 2 cts.

And for every additional one hundred matches or fractional part thereof ..... 1 ct.

For all cigar lights and wax tapers—double the rates herein imposed upon friction or lucifer matches.

*Provided*, That the stamp duties herein provided for on friction or lucifer matches made in part of wood, or on cigar lights or wax tapers, shall not be imposed until Sept 1, 1864; but until that time the tax shall be assessed and collected as heretofore; and on and after said Sept. 1 every package or parcel sold by any person, firm, company or corporation, shall be stamped as herein required.

## MONETARY AND COMMERCIAL.

The condition of the money market has not materially changed since our last week's issue. There have been more or less fluctuations of gold, but they have not been of a violent character, the entire range embracing only some 5 or 6 per cent. The successes of the Federal cause have been uniform, and, thus far, all that could be desired on the part of lovers of the Union, during the entire spring campaign; and, indeed, this has been the case ever since the policy has been adopted of non-interference with the plans of able and true-hearted generals, by men who have never had any experience in military matters, except such as is attained in the management of a country lawsuit in which the greatest display of tactics is evolved in befogging a few unsophisticated and thick-headed witnesses to enable them to carry their point even contrary to justice. This class of talent was curtailed by the creation of the Lieut. General, who was placed head and shoulder above its reach; this wonderful pent-up genius, however, has lately burst forth in the ordering of solemn court martials, composed of Generals, Colonels and Majors, brought from the East and the West at great expense, with all the "pomp and circumstance" attendant on such high tribunals, until their meeting and adjourning for a month without a criminal to try, or anything to do, rendered the thing ridiculous and there was danger of a "big smell" of a "small mice," when the thing is scattered again to the four winds, so that a similar farce may be repeated elsewhere. This, however, does not interfere with the onward progress of our victorious armies and hence may be endured; for soon the rumblings of Sherman's chariot wheels will be heard around

the fortified walls of the Rebel Capital, when we may expect that gold will take a leap downward, that the fall of Charleston, Wilmington, and other places of vast importance to the rebels has failed to effect.

The daily quotations have been:

| Feb. | Opening | Highest. | Lowest. | Closing. |
|---|---|---|---|---|
| 23 | 198¾ | 201⅞ | 198¾ | 199¾ |
| 24 | 200 | 200 | 199 | 199¼ |
| 25 | 199 | 199 | 198½ | 199 |
| 27 | 200½ | 201¾ | 199⅝ | 201¼ |
| 28 | 202⅝ | 203½ | 202½ | 202 |
| March 1 | 200¾ | 201 | 198¾ | 198¾ |

No material decline will take place, in all probability, until Gen Sherman's army reaches some point, within easy supporting distance of the other large Federal forces, the plans for which are known only to the Lt. Gen., and which must take place within a very short time; so that much excitement may be reasonably looked for within the coming week, if the weather does not entirely interrupt army movements. The markets for all kinds of produce and provisions feel the influence of the suspense, giving them a drooping tendency, with inability to make sales at the quotations, which are nominal, accompained with a rather compressible condition of sellers.

In discounts there is but little doing, although bankers feel easier than a week or two ago, rates, however, are without change. Exchange is reported firm at the quotations:

| | Buying. | Selling. |
|---|---|---|
| New York | 1-10 prem. | 1-8 prem. |
| Philadelphia | 1-10 prem. | 1-8 prem. |
| Boston | 1-10 prem. | 1-8 prem. |
| Baltimore | par. | 1-8 prem. |
| Gold | 198@199 | 201 |
| Silver | 185@188 | 193 |


WRIGHTSON & CO.

BOOK & JOB PRINTERS,

167 Walnut St.

CINCINNATI, OHIO.


## CHANGE OF TIME.

## Indianapolis and Cincinnati

THREE THROUGH TRAINS DAILY as follows:

| | Leave. | Arrive. |
|---|---|---|
| St. Louis and Chicago Express | 6.30 A. M. | 10.15 A. M. |
| Springfield & St. Joseph Express | 1.00 P. M. | 5 00 P. M. |
| St. Louis & Chicago Express | 4 00 P. M. | 1.30 A. M |

Sleeping cars by this train for St. Louis and Chicago

ACCOMMODATION TRAINS.

| | Leave. | Arrive. |
|---|---|---|
| Lawrenceburg Accommodation | 4.25 P. M | 8 30 A. M. |
| Harrison | 9.00 A. M. | 3.00 P. M. |

Through Tickets can be obtained at the Spencer House, Burnet House and Gibson House Offices, and at the Depot.

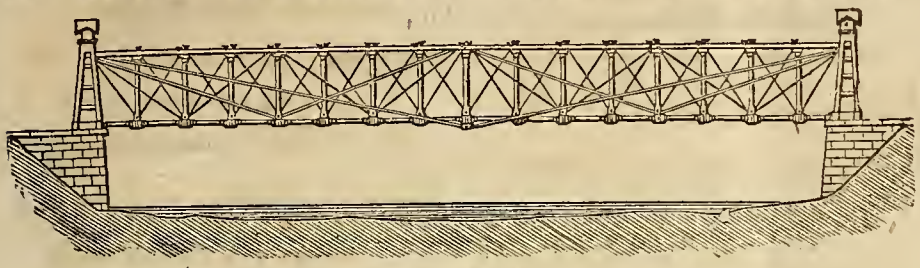
☞ Passenger Depot corner of Pearl and John streets, within a few squares of all the principal Hotels in the city.

ROBERT MEEK, Supt.

## General Ticket Agents of the Principal Railroads.

| | | |
|---|---|---|
| Atlantic & Great Western Railway | T H. Goodman. | General Ticket Agent, Meadville, Pa. |
| Buffalo & Erie | J. A. Burch | General Ticket Agent, Buffalo, N. Y. |
| Buffalo, New York & Erie | Wm L. Doyle | " " " Buffalo, N. Y. |
| Buffalo & Lake Huron | Thos. W Bussell, | " " Brantford, C. W. |
| Burlington & Missouri River Railway | L. Carper. | " " Burlington, Iowa, |
| Boston & Worcester | L. K. Miles, | " " " Boston, Mass |
| Bellefontaine Railway Line | Chas. Wood. | Gen. Ticket Agent Terre Haute, Ind' |
| Boston & Providence | James Dilley, | Ticket Agent. Boston, Mass. |
| Baltimore & Ohio | L. M Cole | " Baltimore, Md. |
| Bost. Concord & Mont and Wh. M | J. L. Rogers. | " Plymouth, N H. |
| Chicago, Mil. LaCrosse & St Paul | V H Carpenter. | Gen Ticket Agent, Milwaukee Wis. |
| Chicago, Burlington & Quincy | Samuel Powell. | General Ticket Agent. Chicago. Ill. |
| Chicago & R. Island and Miss. & Mo | W L St. John, | " " " Chicago, Ill. |
| Chicago, Alton & St. Louis | Joseph Price, | Treasurer, Chicago, Ill. |
| Chicago & North Western | E. P Cutler, | General Ticket Agent, Chicago, Ill. |
| Connecticut & Passumpsic Rivers | Nathaniel P. Lovering. | " " " St Johnsbury, Vt. |
| Chicago, Iowa & Nebraska | Jas. M. Ham. | General Passenger Agent. Clinton, Iowa, |
| Central Railway of New Jersey | H. P Baldwin. | General Ticket Agent, 69 Wall Street, N. Y. |
| Catawissa Railway Co | H H Mc Connell. | Freight and Passenger Accountant, Philadelphia, Pa. |
| Central Ohio | John W. Brown, | General Ticket Agent. Columbus, Ohio. |
| Columbus & Indianapolis R R | F. Chandler, | " " " Indianapolis, Ind. |
| Cincinnati & Zanesville | E. S Lowe. | " " " Cincinnati " |
| Cincinnati & Chicago Air-Line | L. H Walkley, | " " " Richmond. Ind |
| Cheshire | R. Stewart, | " " " Keene, N H. |
| Connecticut River Railway | E Morgan | " " " Springfield, Mass. |
| Cleveland, Painesville & Ashtabula | J. W Cary, | " " " Cleveland, Ohio. |
| Cleveland & Pittsburg | F R Myers. | " " " " " |
| Cleveland & Toledo | John U. Parsons, | " " " " " |
| Cleveland, Columbus & Cincinnati | H C. Marshall, | " " " " " |
| Cincinnati, Hamilton & Dayton | P. W. Strader, | " " " Cincinnati, " |
| Concord, Manchester & Lawrence | Geo. G. Sanborn, | " " " Concord N. H. |
| Dayton & Michigan | P W. Strader, | " " " Cincinnati, Ohio. |
| Dubuque, & South-Western | Geo. W. Farley, | Receiver, Dubuque Iowa. |
| Dubuque & Sioux City | J. A. Pinto, | General Ticket Agent. Dubuque, Iowa. |
| Detroit & Milwaukee | Jas. H. Muir, | Auditor, Detroit, Mich |
| Erie Railway | Wm. R. Barr | General Passenger Agent. New York. |
| Eaton & Hamilton | E. W. McGuire. | General Ticket Agent, Eaton, Ohio |
| Evansville & Crawfordsville | J. E. Martin, | Secretary, Evansville, Ind. |
| Elmira & Williamsport | Edmund B Smith. | General Ticket Agent. Elmira, N. Y |
| East Pennsylvania | Philip M Ermentrout, | " " " Reading, Pa. |
| Erie & Pittsburg | J A Burch, | " " " Buffalo, N. Y. |
| Fitchburg Railway | H. F. Whitcomb, | " " " Boston, Mass |
| Great Central Railway Line | F. Chandler, | General Ticket Agent, Indianapolis, Ind, |
| Great Western Railway (Canada) | J. Charlton, | Auditor, Hamilton, C. W. |
| Great Western Railway Co of 1859 | W. D Richardson, | General Ticket Agent, Springfield, Ill |
| Grand Trunk Railway (Canada) | Henry Shackell. | Auditor, Montreal. C. E |
| Hudson River Railway | C. H. Kendrick, | General Ticket Agent. New York. |
| Hannibal & St. Joseph | P. B Groat, | " " " Hannibal, Mo |
| Indianapolis & Cincinnati | F. B. Lord, | " " " Indianapolis, Ind. |
| Indianapolis, Peru & Chicago | V. T. Malott. | Treasurer. Indianapolis, Ind |
| Illinois Central | Wm. P. Johnson. | General Passenger Agent, Chicago, Ill. |
| Indiana Central | F. Chandler. | General Ticket Agent. Indianapolis. Ind |
| Jeffersonville | Jas. Ferrier | " " " Jeffersonville, Ind. |
| Kentucky Central | H. P Ransom, | General Ticket Agent. Covington Ky. |
| Keokuk, Ft. Des Moines & Minn | John Givin, | " " " Keokuk, Iowa. |
| Little Miami and Columbus & Xenia | P W. Strader | " " " Cincinnati, Ohio. |
| Logansport, Peoria & Burlington | E. M. Whitlock, | Chief Clerk. Peoria, Ill. |
| La Crosse & Milwaukee | J M. Kimball, | General Ticket Agent, Milwaukee, Wis. |
| Louisv. & Frankfort and Lex. & F | Henry Steffee, | General Freight and Ticket Agent, Louisville, Ky |
| Lafayette & Indianapolis | John M Kerper, | General Ticket Agent. Lafayette. Ind. |
| Louisville, New Albany & Chicago | J. G. Williamson, | " " New Albany, Ind |
| Louisville & Nashville | D. A. Kean | Chief Clerk. Louisville, Ky |
| Michigan Central | Thos. Frazer, | General Ticket Agent, Detroit. Mich. |
| Mich. Southern & Northern Indiana | C. P. Leland, | " " " Toledo, Ohio. |
| Milwaukee & Prairie du Chien | E. P Bacon, | " " " " " |
| Milwaukee & St. Paul | F. W Spear, | General Ticket Agent Milwaukee, Wis. |
| Marietta & Cincinnati | Chas. F Low, | General Ticket Agent, Chillicothe. Ohio. |
| Montreal & Champlain | J F Barnard. | " " " Montreal. C. E. |
| New York Central | E. F. Folger, | Chief Clerk. Albany. New York. |
| New York, Harlem & Albany | R R. Freeman. | General Ticket Agent. New York. |
| Norwich & Worcester | Edward T. Clapp. | Secretary. Norwich. Conn. |
| Northern Central | Edward S. Young | General Ticket Agent, Baltimore. Md. |
| New York & New Haven | Jacob Mendel. | " " " New York. |
| New Haven & Northampton | E. A Ray. | Superintendent and Clerk, Westfield M |
| North Missouri | Jas. H Concannon, | General Ticket Agent. St. Louis, Mo. |
| Northern (N. H.) | A. C. Warren, | " " " Concord, N. H. |
| N. Haven, N. London & Stonington | Wm. T. Bartlett. | " " " New Haven, Conn. |
| North Pennsylvania | Ellis Clark. | " " " Philadelphia, Pa |
| Northern New York | Marshall Conant, | " " " Malone, N. Y. |
| Ohio & Mississippi | Chas. E. Follett, | " " " Cincinnati, Ohio. |
| Philadelphia & Reading | John Welch. | General Ticket Agent, Philadelphia, Pa. |
| Pennsylvania Railroad | H W. Gwinner, | " " " " " |
| Pittsburg, Columbus & Cincinnati | Ira A Hutchinson, | General Ticket Agent, Columbus, Ohio |
| Pittsburg, Fort Wayne & Chicago | H. R. Payson | " " " Pittsburg, Pa. |
| Pacific Railway of Missouri | E. W. Wallace. | General Ticket Agent, St. Louis, Mo. |
| Philadelphia, Wilmington & Balt | Geo. A. Dadmun, | " " " Philadelphia, Pa. |
| People's Line of Steamers (N. Y. | John C. Hewitt, | " " " New York. |
| Providence & Worcester | Wm. M. Durfee, | " " " Providence, R I. |
| Portland, Saco & Portsmouth | Eliphalet Nott. | Treasurer, Portland. Me. |
| Quincy & Toledo | W. D. Richardson. | General Ticket Agent. Springfield. Ill. |
| Racine & Mississippi | R. C. Tate. | " " " Racine, Wis. |
| Rutland & Washington | John McKengh, | " " " Rutland, Vt. |
| Rutland & Burlington | Wm. A. Burnett | " " " " " |
| Rome, Watertown & Ogdensburg | H. T. Frary, | " " " Watertown, N. Y. |
| Rensselaer & Saratoga | O, N. Crandall, | " " " Troy, N. Y. |
| Sandusky, Dayton & Cincinnati | J. M. Webster, | " " " Sandusky, Ohio. |
| Sandusky, Mansfield & Newark | H. M. Bronson, | " " " " " |
| Saratoga & Whitehall | J. H. Sternbergh, | " " " Sarotoga Springs, N |
| The United States Mail Line Co | Thos. Sherlock, | Treasurer, Cincinnati, Ohio. |
| Terre Haute, Alton & St. Louis | Jas. B Ralston, | General Ticket Agent, St. Louis, Mo. |
| Terre Haute & Richmond | Chas. Wood, | Secretary, Terre Haute, Ind |
| Troy & Boston | G. W. Moseley, | General Ticket Agent, Troy, N. Y. |
| Toledo & Wabash | J. E. Carpenter, | Cashier, Toledo, Ohio. |
| Vt. & Can., Vt. Central, and Sullivan | H. H. Locklin, | General Ticket Agent, St. Albans, Vt. |
| Western (Mass.) Railway | M. Griggs, | " " " Springfield, Mass |
| Worcester Nashua | M. Witter, | " " Worcester, Mass. |

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

**For plans and particulars, apply to**

mar. 5, '53. 1y. **Letter Box, 1393.** **C. J. SCHULTZ, Pittsburgh, Pa.**

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

**BRIDGE BOLTS,** Rivets [illegible] Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27 1y

---

WRIGLEY & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotives. 419 y

---

## KNOX & SHAIN,
## Engineering and Telegraphic

INSTRUMENT MAKERS,

**PHILADELPHIA**

---

## JOHN HOLLAND,

**Successor to GEO W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS.

**Either Single or Double Plate,**

**With or Without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

Manner, at the Shorteste, and on the

**Most Reasonable Terms.**

---

## Manufacturers, Importers & Dealers

—IN—

## RAILROAD, CAR,

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

**MACHINERY OF EVERY DESCRIPSION**

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

## RAILWAY SPRINGS.

**FREIGHT**





*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS.

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, an one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI, O.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,
## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest Central West and Southwest At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY

W P. SMITH. *Master Transportation. Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't. Bellaire, O.*
L M COLE, *Gen. Ticket Agent. Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express..... | 6 00 A. M. | 7 30 P. M. |
| Mail and Express ..... | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation..... | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation..... | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express ..... | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail..... | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo..... | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation..... | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville..... | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A. M. |
| Hamilton Accommodation..... | 7 30 P. M. | 8 05 A. M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily.**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph, Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St. Louis and Cairo Mail..... | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation..... | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express. ..... | 8:00 P M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at.....4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street

C. E. FOLLETT,
General Ticket Agent.

W D. GRISWOLD, General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place anites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train eaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

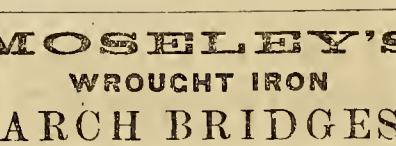
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

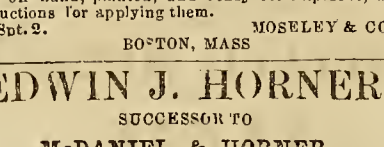
Sept. 2. MOSELEY & CO.

BOSTON, MASS

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

## Lewistown, Mifflin Co., Penn'a

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

THE SCHENECTADY

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—2 to 24 inches in diameter, and branches for same. &c.,

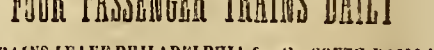
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!!**



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11.30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M. (Express.

On Sundays, 10.24 P M.

☞Through connections made for all points East and West

WM STEARNS SCOTT.

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, MARCH 9, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per anuum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Cincinnati Express | 6.00 A. M. | 7.30 P. M. |
| Mail | 9.00 A. M. | 8.15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11.30 A. M. |
| Morrow Accommodation | 6.20 P. M. | 8.00 A. M. |
| Night Express | 10.00 P. M. | 10.05 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky Mail | 7.00 A. M. | 5.45 P. M. |
| Dayton & Toledo | 7.00 A. M. | 9.45 P. M. |
| Cin. & Chicago Air Line Express | 7.00 A. M. | 9.45 P. M. |
| Dayton Accommodation | 2.20 P. M. | 5.45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5.00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7.00 P. M. | 12.35 P. M. |
| Hamilton Accommodation | 7.00 P. M. | 8.05 A. M. |
| do do | 10.00 A. M. | 6.45 A. M. |
| *Marietta & Cincinnati—* | | |
| Mail Express | 7.40 A. M. | 7 00 P. M. |
| Chillicothe Accommodation | 3.30 P. M. | 11.30 A. M. |
| *Ohio & Mississippi—* | | |
| Louisville, St. Louis and Cairo Mail | 7.00 A. M. | 11.30 P M. |
| St. Louis and Cairo Express | 6.00 P. M. | 5.00 A. M. |
| Louisville, St. Louis and Cairo Express | 7 40 P. M. | 8.20 A. M. |
| *Indianapolis & Cincinnati—* | | |
| St. Louis and Chicago Express | 6.30 A. M. | 11.00 A. M. |
| Mail | 1.00 P. M. | 5.00 P. M. |
| Night Express | 4.00 P. M. | 1.30 A. M. |
| Lawrenceburg Accommodation | 4 25 P. M. | 8.35 A. M. |
| Harrison Accommodation | 9.00 A. M. | 3.00 P. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Morning Express | 9 00 A. M. | 7.30 P. M. |
| Accommodation | 4.00 P. M. | 8.05 A. M. |
| *Kentucky Central,—* (City time.) | | |
| First Train | 6.00 A. M. | 10.40 A. M. |
| Second Train | 2.00 P. M. | 6 00 P. M |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## ANNUAL REPORTS AND CONDITION

OF THE RAILROADS OF PENNSYLVANIA.

This volume, made by the Auditor General of Pennsylvania, contains nearly 500 pages of the reports of the various companies with a compendium. As a whole, it is very nearly complete, and yet it might be improved very much. For example, instead of giving "Live Stock," by tons, it should be given by *number* and distinguish the *kinds*. There is a great deal of difference between a ton of sheep and a ton of cattle. There should be given also the quantity of *fuel* consumed and the kinds and prices. In the length of each road should be given the termini. In one word a statistical account of a railroad should present an exact picture of all its operations and character as a great machine. We should know then exactly how to estimate its value, by comparing its utility with the cost of its operations. We should know precisely its functions in regard to the movement of society. This volume, however, contains nearly everything and is very instructive. We shall proceed to give an analysis of such parts as we can not well extract, and a brief digest of the residue.

| | |
|---|---|
| Number of roads | 73 |
| Capital stock paid in | $144,132,579 |
| Total amount of debt | 86,228,897 |
| Total amount of money received, | 230,361,476 |
| Amount expended by 59 roads | 174,329,776 |

The fourteen roads which have not returned their cost of construction no doubt make up most of the deficiency which is expressed by the "amount expended." The following table, which we take from the compendium, will show the names, length, guage, and cost of the roads:

| NAME OF COMPANY. | Cost of road and equipment. | Length of main line (in miles) in the State, as near as can be ascertained. | Guage of road. |
|---|---|---|---|
| Atlantic and Great Western | not stated. | 92½ | 6 |
| Allegheny Valley | $1,828,731 00 | 180 | 4 8½ |
| Barclay coal company | | 16 | |
| Bellefonte & Snow Shoe | 371,263 62 | 26¾ | 4 8½ |
| Bald Eagle Valley | 1,050,000 00 | 51 | 4 8½ |
| Buffalo, Bradford & Pittsburg | | 14¾ | 6 |
| Cleveland, Phinsville and Ashtabula | 4,703,845 53 | 25½ | 4 10 |
| Cleveland and Pittsburg | | 15 | |
| Cumberland Valley | 1,131,037 05 | 56 | 4 8½ |
| Catawissa | 3 634,000 00 | 65 | 4 8½ |
| Chestnut Hill | 120,650 00 | 4¼ | 4 8½ |
| Chester Valley | | 21½ | 4 8½ |
| Catasauqua & Fogelsville | 332,275 00 | 12 | 4 8½ |
| Delaware, Lackawanna and Western | 9,620,385 64 | 113 | 6 |
| Delaware and Hudson Canal and Railroad | 1,921,361 00 | 32 | 4 3 |
| East Pennsylvania | 1,392,110 39 | 36 | 4 8½ |
| Erie and North East | 700,000 00 | 18¼ | 4 10 |
| Elmira and Williamsport | 2 570,000 00 | 69 | 4 8½ |
| Erie and Pittsburg | 1,781,386 58 | 81 | 4 10 |
| East Mahanoy | 380,550 00 | 8 | 4 8½ |
| East Brandywine and Waynesburg | 259,000 00 | 17½ | 4 8½ |
| Ebensburg and Cresson | | 11 | |
| Erie, (N. Y.) | | 42¼ | |
| Fayette County | 130,000 00 | 12¾ | 4 8½ |
| Franklin | 223,127 11 | 16 | 4 8½ |
| Gettysburg | | 17 | |
| Harrisb'rg, Portsmouth, Mount Joy and Lancaster | not stated. | 18 | 4 8½ |
| Huntington and Broad Top Mountain | 2,012,243 00 | 43½ | 4 8½ |
| Hanover Branch | 227,839 28 | 12 | 4 8½ |
| Hempfield | 1,657,799 94 | 17 | 4 8½ |
| Hazleton | not stated. | 14 | 4 8½ |
| Ironton | 241,821 77 | 9.68 | 4 8½ |
| Jamestown and Franklin | not stated. | 40 | 4 10 |
| Junction | 471,086 97 | 4.62 | 4 8½ |
| Lorberry Creek | 82,050 00 | 5½ | 4 8½ |
| Lehigh and Susquehanna | 1.894,988 00 | 91 | 5 8½ |
| Lehigh and Lackawanna | not stated. | 35 | 4 8½ |
| Lehigh Luzerne | 322,566 13 | 9¼ | 4 8½ |
| Lehigh and Mahanoy | not stated. | 40 | 4 8½ |
| Little Schuylkill navigation, railroad and coal company | 1,371,868 41 | 28¼ | 4 8½ |
| Little Saw Mill Run | 38,044 13 | 3 | 4 8 |
| Lehigh Valley | 9 173,116 47 | 70 | 4 8½ |
| Lykens Valley & coal company | 600,000 00 | 16 | 4 8½ |
| Littletown | | 7¼ | |
| Lackawanna and Bloomsburg | 3,625,809 40 | 80 6 | 4 8½ |
| Mill Creek and Mine Hill navigation and | not stated. | 4 | |
| Mine Hill & Schuylkill Haven | 3,700,000 00 | 130½ | 4 8½ |
| Mount Carbon | 203 257 58 | 7 | 4 8½ |
| Mount Carbon and Port Carbon | not stated. | 2½ | |
| Mahanoy and Broad Mountain | 948,789 32 | 12½ | 4 8½ |
| M'Cauley Mountain and Black Creek | 160,500 00 | 5½ | 4 8½ |
| Northern Central | 9,022,829 01 | 103 | 4 8½ |
| Northern Pennsylvania | 6,067,793 29 | 55 | 4 8½ |
| North Lebanon | 306,706 23 | 7½ | 4 8½ |
| Nanticoke | 80,000 00 | 10 | 4 8 |
| Nesquehoning Valley | 36,117 17 | 13 | 4 8½ |
| New Castle and Beaver Valley | 374,000 00 | 15 | 4 10 |
| Oil Creek | 1,241,762 97 | 54 | 6 |
| Pittsburg, Fort Wayne and Chicago | 20,500,347 34 | 49 | 4 10 |
| Pittsburg and Connellsville | 2,272,100 27 | 140 | 83.10 |
| Pittsburg and Steubenville | | 35 | |
| Philadelphia and Reading | 24,734,756 63 | 147 | 4 8½ |
| Philadelphia and Erie | 15,700,623 00 | 287 | 4 8½ |
| Phila. and Baltimore Central | 978,167 30 | 31 | 4 8½ |
| Phila., Wilmington and Baltimore | not stated. | 17¾ | 4 8½ |
| Philadelphia and Trenton | 960,404 | 28 | 4 10 |
| Philadelphia, Germantown and Norristown | 1,401,477 | 17 | 4 8½ |
| Pennsylvania | 22,813,610 | 354 | 4 8½ |
| Pennsylvania coal company | 2,000,000 | 47 | 4 8½ |
| Reading and Columbia | 1,396,797 | 40 | 4 8½ |
| Schuylkill and Susquehanna | 1,308,686 | 54 | 4 8½ |
| Schuylkill Valley navigation and railroad | not stated. | 9 | |
| Shawmut and Ridgway | 250,000 | 19 | 4 8½ |
| Shamokin Valley & Pottsville | not stated. | 28 | 4 8½ |
| Tioga | 908,137 | 29½ | 6 |
| Trevorton coal & railroad | | 15 | 4 8½ |
| Tyrone and Clearfield | 456,931 38 | 23½ | 4 8½ |
| Wrightsville, York and Gettsburg | 393,290 43 | 43 | 4 8½ |
| West Chester | not stated. | 9 | 4 8½ |
| West Chester and Philadelphia | 1,416,500 37 | 26 | 4 8½ |
| Western Pennsylvania | 664,319 18 | 35 | 4.71 |
| | $174,399,776 | 3.436 | |

| | |
|---|---|
| Number of through passengers on each road | 2,399,672 |
| Number of passengers of all classes | 14,252,218 |
| Gross amount of tonnage for the year | 23,018,977 |

The amount of coal and iron carried on the Pennsylvania railroads makes a very interesting part of these reports. The following is a detailed account of the transportation of coal and iron:

| NAME OF COMPANY. | Anthracite coal. | Bituminous coal. | Pig iron. |
|---|---|---|---|
| Atlantic and Great Western | | 13,625 | |
| Allegheny Valley | | 65,790 | |
| Bellefonte and Snow Shoe | | 33,593 | |
| Cleveland, Painsville and Ashtabula | | 3,744 | |
| Cumberland Valley | 26,452 | | 4,919 |
| Catawissa | 89,209 | 1,351 | 11,040 |
| Chestnut Hill | | | |
| Catasauqua & Foglesville | 7,031 | | |
| Delaware, Lackawanna and Western | 1,382,600 | 535 | 2,825 |
| Delaware and Hudson canal and railroad | 924,411 | | |
| East Pennsylvania | 17,852 | 11 732 | |
| Erie and North East | | | |
| Elmira and Williamsport | 68,812 | | 13,213 |
| Erie and Pittsburg | | | |
| Huntington and Broad Top Mountain | | 332,029 | 1,004 |
| Hanover Branch | | | |
| Hempfield | | | |
| Hazleton | 939,177 | | |
| Ironton | 3,580 | | |
| Lehigh and Susquehanna | 132,213 | | |
| Lehigh Luzerne | 569,219 | | |
| Little Saw Mill Run | | 115,459 | |
| Lehigh Valley | 1,631,878 | 9,685 | 149,906 |
| Lykens Valley & coal company | 138,210 | | |
| Lackawanna & Bloomburg | 516,473 | | |
| Mount Carbon | 168,019 | | |
| Mount Central | 192,996 | | 20,478 |

| | | | |
|---|---|---|---|
| North Pennsylvania | 144,172 | 311 | 21,556 |
| North Lebanon | 36,453 | ..... | 29,460 |
| New Castle & Beaver Valley | ..... | ..... | ..... |
| Oil Creek | ..... | 3,058 | ..... |
| Pittsburg, Fort Wayne and Chicago | ..... | 154,498 | ..... |
| Pittsburg and Connellsville | ..... | 146,596 | ..... |
| Philadelphia and Reading | 3,099,240 | 335,096 | 98,084 |
| Philadelphia and Erie | 91,173 | 27,777 | 29,351 |
| Philadelphia and Baltimore Central | ..... | ..... | ..... |
| Philadelphia, Wilmington & Baltimore | 9,466 | ..... | 6,839 |
| Philadelphia and Trenton | ..... | ..... | ..... |
| Philadelphia, Germantown & Norristown | 157,957 | 4,000 | ..... |
| Pennsylvania | 117,803 | 959,862 | 147,650 |
| Pennsylvania coal company | 836,792 | 68 | ..... |
| Reading and Columbia | 7,735 | ..... | 700 |
| Schuylkill and Susquehanna | 281,782 | ..... | ..... |
| Shamokin Valley and Pottsville | 263,910 | ..... | 3,156 |
| Tioga | 588 | 353,124 | 10 |
| Trevorton coal & railroad | 60,287 | ..... | ..... |
| | 11,915,580 | 2,571,854 | 547,948 |

The great coal roads are the Reading, the Lehigh Valley and the Lackawanna. These carry about half the coal products of Pennsylvania. It will be observed that the Anthracite coal makes five sixths of all the coal product of that State.

From the facts above stated we draw the following inferences:

| | |
|---|---|
| Average cost of roads | $67,000 |
| " debt of roads | 25,000 |
| " number of passengers | 4,000 |
| " " of tons | 6,500 |
| Total amount of expenses | $30,547,337 |
| " " of receipts | 52,038,867 |
| " " of net profits | 21,491,530 |
| Net profits, pro-rata | 9 per cent. |

This exhibit is on the whole the best we have ever seen of so large an amount of railroad capital. It is due mainly to two causes; 1. That the war has thrown on the roads an immense amount of railroad business, which would otherwise have gone North; and 2. That Pennsylvania, like Ohio, is a gateway State, through which this immense traffic from the West to the East is thrown. The business of the Pennsylvania roads will probably continue good; but when the war ceases and things resume their natural course, they will probably for sometime have little increase.

THEINE IN THE KOLA NUT.—At a recent meeting of the Pharmaceutical Society in London, Prof. Bently announced that Dr. Daniel had discovered theine in the kola nut—the fruit of the kola, or *sterculia acuminata*—an article much used as food by the natives of Central Africa. As the plant belongs to the same order as the cocoa, or to an order closely allied to it. Dr. Daniel thinks the substance may be theobromine; but Dr. Attfield exhibited some of it which he had extracted from nuts sent by Dr. Daniel, and the crystals resembled so exactly those of theine extracted from tea, that he had no doubt it was theine, and not theobromine. Theine is the essential principal found in tea, coffee, and in a small measure in cocoa; and hitherto not found in other plants. But it exists in bile; and Dr. Ure believes that tea or coffee or cocoa is therefore almost a necessary part of diet, especially for persons of sedentary habits. A new article containing theine, that can be used as a beverage, may therefore be of great importance, if it can be produced cheaply.—*Artisan.*

## EIGHTEENTH ANNUAL REPORT.

OF THE PENNSYLVANIA RAILROAD COMPANY.

OFFICE PENNSYLVANIA RAILROAD COMPANY,
PHILADELPHIA, February 18, 1865.

*To the Stockholders of the Pennsylvania Railroad Company.*

The following condensed statements will exhibit the earnings and expenses connected with the operation of the Company's works during 1864:

Pennsylvania Railroad and branches.

EARNINGS.

| | | |
|---|---|---|
| From Passengers, 1st Class | | $3,239,990 77 |
| " Emigrants | | 94,904 37 |
| | | $3,234,895 14 |
| " U. S. Troops | | 511,773 88 |
| " U. S. Mail | | 76,830 16 |
| " Expresses under contract | | 75,900 00 |
| " Extra Express Freight | | 369,511 12 |
| | | 345,411 12 |
| " General Freight | | 10,371,999 32 |
| " Miscellaneous Sources | | 128,148 04 |
| Total earnings | | $14,759,057 66 |

EXPENSES.

The cost of operating the line in 1864 was:

*Conducting Transportation.*

| | | |
|---|---|---|
| For ordinary expenditures | $2,624,916 58 | |
| " Erection of Passenger and Freight stations and extension of existing buildings | 406,614 79 | |
| | | 3,031,531 37 |

*Motive Power.*

| | | |
|---|---|---|
| For ordinary repairs and renewals, including 19 new engines, costing $331,845 83, charged to this account to meet depreciation, &c., also erection of Machine Shops at West Philadelphia | $2,536,666 79 | |
| " Additional Tools and Shop Machinery, chiefly outfit of Philadelphia & Erie Railroad | 105,693 56 | |
| " Additional locomotives, purchased for Philadelphia and Erie R. R., &c. | 613,671 96 | |
| | | 3,256,052 32 |

*Maintenance of Cars.*

| | | |
|---|---|---|
| For ordinary repairs and renewals, including erection of Car Shop at West Philadelphia | $853,929 12 | |
| " Additional freight cars | 928,792 07 | |
| " " passenger cars | 222,271 85 | |
| | | 2,004,993 04 |

*Maintenance of Road.*

| | | |
|---|---|---|
| For ordinary repairs of railway and renewals of structures | $2,057,547 85 | |
| " Additional second track and sidings | 191,220 28 | |
| | | 2,248,768 13 |
| General expenses | | 152,599 33 |
| Total expenditures connected with the business of the Pennsylvania Railroad, including additions to the facilities for transportation on its own road and that of the railroads it operates | | $10,693,944 19 |

*Recapitulation.*

| | |
|---|---|
| Gross earnings | $14,759,057 66 |
| Total ordinary expenses | 8,225,659 67 |
| Total construction account | 2,468,284 52 |
| | 10,693,944 19 |
| Leaving balance | $4,065,113 47 |

The gross revenues of the line for 1864 are equal to $41,226 per mile of main line of road, (358 miles,) and exceed in the aggregate those of 1863, $2,867,644 71.

This increase is $1,059,358 36 upon Passengers and Emigrants; $1,231 96 upon United States Mails; $1,759,737 35 upon ordinary, and $82,282 30 on Express freights.

A decrease occurs in Miscellaneous receipts of $32,045 96, and in United States Troops of $2,919 30.

The whole number of Passengers carried over the Road during the year was 2,366,213, and the average distance traveled by each passenger 62 miles.

The number of tons of freight moved, (including 179,497 tons of fuel and other materials transported for the Company) was 2,764,876, embracing 1,086,779 tons of coal.

The increase in the coal traffic is 183,580 tons, and the whole tonnage of the road exceeds that of last year 310,550 tons.

The ordinary expenditures for working and maintaining the Company's roads were $8,225,659 67, which is equal to 55 7-10 per cent. of its revenues, or 72 4-100 per cent., including all the expenditures, made for work on its own line and the outfit of the Philadelphia and Erie Railroad.

The earnings of the Company's Canals were:

| | |
|---|---|
| From Susquehanna Division | $253,797 57 |
| " Juniata Division | 29,532 76 |
| " Western Division | 12,174 72 |
| " Miscellaneous sources | 13,120 18 |
| Total earnings | $308,615 23 |

Against $287,156 52 in 1863.

The cost of maintaining, enlarging and operating the Canals was:

| | |
|---|---|
| For Susquehanna Division | $153,794 93 |
| " Juniata Division | 126,560 02 |
| " Western Division | 30,200 57 |
| | 310,555 32 |
| Showing a loss on the Canals during 1864 of | $1,940 09 |

The loss upon the canals during the previous year was $75,217 80.

In consequence of the original faulty location and construction, and the neglect of these works by their original proprietor, they have not yielded results equal to our anticipation.

It is believed, however, that they will become eventually a source of considerable net profit. The Company has expended upon their maintenance and improvement since they came into their possession, (seven years and five months,) $1,606,365 22, and receive $1,701,811 34 in tolls for their use.

The low charges necessarily maintained for coal upon the railway of the Company has prevented the transfer of that commodity—the only one of importance available for its support to any material extent—to its canal, except when shipped to points not reached by the road or its connections.

The earnings of the Philadelphia and Erie Railroad in 1864 were:

| | |
|---|---|
| From Passengers | $479,822 44 |
| " Troops | 31,389 18 |
| " Freights | 545,037 45 |
| " Express matter | 16,345 16 |
| " Mails | 14,390 03 |
| " Miscellaneous sources | 44,163 72 |
| Total earnings | $1,131,147 98 |

The operating expenses during the same time were:

| | |
|---|---|
| For Conducting transportation | $217,245 96 |
| " Motive power | 234,698 75 |
| " Maintenance of way | 354,163 21 |
| " Maintenance of cars | 32,485 91 |
| " Thirty per cent. due on lease to meet interest on bonds, taxes, &c | 335,708 95 |
| | 1,174,302 78 |
| Showing a loss in operating the line of | $43,154 80 |

The line was not open for business until the 17th of October last, the beginning of the inclement season of the mountainous region it traverses, and then with an incomplete track, insufficient sidings and shops to meet the wants of the transportation department; hence, its operation have been conducted at much extra cost, and have necessarily been confined to the accommodation of its local traffic. The result of the year's business is therefore no evidence of what may be expected hereafter from this great work. The whole line is still incomplete and very little of its superstructure is founded upon ballast so essential to the maintenance of the track in good condition under heavy transportation.

The whole revenues of the Pennsylvania Railroad Company for its several lines are as follows:

| | |
|---|---|
| From the Pennsylvania Railroad and Branches | $14,759,057 66 |
| From the Pennsylvania Canals | 308,615 23 |
| From the Philadelphia & Erie Railroad | 1,131,147 98 |
| Total | $16,198 820 87 |

Of the net profits of the Company for the year ($4,065,113 47) there has been applied to the payment of two semi-annual dividends of five per cent. $1,523,637 00; to dividends to Harrisburg and Lancaster Railroad Company and interest upon the Company's debt, $1,113,024 03; and to taxes upon dividends and coupons, $323,609 00; in all, $2,960,270 93. The remainder, $1,104,842 54, has been appropriated to the construction of other roads, to represent which the Company holds their bonds.

The semi-annual dividends, in order to afford time to make up the dividend books, will be paid hereafter on the 30th days of May and November, instead of the 15th as heretofore.

The surplus of the Company mentioned in our last annual report as applicable to the railways, commenced under an expectation of receiving financial aid, and considered necessary to the full development of the traffic of this Company have equaled anticipations, but the cost of these works for reasons that are familiar to all, has largely exceeded the estimate then made. From an analysis of these expenditures it appears that it *now* requires about three dollars to perform the office of one dollar in 1861. The rate of wages has not increased in this ratio, but it seems to be a general principal, that as the remuneration of labor is increased its character and product decreases. This state of things could be met by increased charges upon transportation during their continuance as compensation for the depreciation of the currency, if the legal rates were not limited, but, under existing circumstances the stoppage of all improvements that have not progressed to an extent that true economy will justify their early completion, is the only remedy left. At the present prices for work, the prospective profits for the construction of new railway must be large to induce capital to enter into construction. The cash capital required to carry on the operations of the Company, invested in materials for repairs of its road and machinery, and balance in the hands of Agents and Treasurer amounted at the close of the year to the large sum of $2,878,847 57, $1,072,638 99 more than at the same time the previous year, which is chiefly due to the enhanced cost of everything entering into the construction of railways and their equipment.

The estimates of the Philadelphia and Erie Railroad Company, for the expenditures on Construction account in 1864, for reasons already mentioned, have fallen much below the cost of the work undertaken, while the political condition of the country has prevented the sale of the Sterling Bonds received from that Company for these outlays upon satisfactory terms. All of the dollar Bonds purchased under the contract and lease of that road have been sold. Of the £600,000 Sterling Bonds purchased £248,800 have been placed in the Sinking Fund in exchange for Pittsburg, Fort Wayne and Chicago Railway Company's Bonds, since sold, and £40,200 have been disposed of, leaving on hand and in London £311,000. These Bonds have the guarantee of this Company, and in view of the unusually large basis upon which they are founded, constitute as safe an investment of capital as can be made.

The expenditures required upon the Philadelphia and Erie line to place it in a condition to accommodate a business sufficient to meet the expectations of the Company, are still very large. The advances for this work during the year, exclusive of rolling stock and shop machinery, have been

| | |
|---|---|
| For Construction Account | $1,806,800 29 |
| " Materials on hand for Construction and Repairs | 468,764 09 |
| | $2,275,564 38 |

which is in excess of the securities purchased by this Company under its contract with the Philadelphia and Erie Railroad Company $889,598 69, exclusive of material account ($468,764 09) a portion of which will be applied to working the road.

To cover these expenditures, which are increasing monthly, and complete its line, that Company is asking of the Legislature the privilege of increasing its mortgage indebtedness $3,000,000, all of which will be necessary for the completion of the requisite additional sidings, shops, wharves, passenger and freight stations, to meet the demands of its anticipated traffic.

Of the securities received from the Steubenville and Indiana Railroad Company, under its reorganization, for aid extended to that Company, and for advances made towards the completion of the line east of Steubenville, there remains in the hands of the Treasurer for sale $1,305,000. These Bonds are all first class securities, and will be disposed of as the market will ahsorb them to meet expenditures in 1865.

The investments made by this Company in the Stock and Bonds of the Pittsburgh, Fort Wayne and Chicago Railway Company to insure its completion, have all been sold except 1,200 shares of its Stock, and $200,000 of its Third Mortgage Bonds, at a considerable advance upon their cost. The interest of the Company in the Bedford Railroad and in the New Castle (Lawrence County) Railroad received for aid extended towards the completion of these works, has also been disposed of upon satisfactory terms.

A shorter and an independent connection between the western terminus of the Pennsylvania Railroad and the metropolis of Ohio and its capital has always been deemed to be of the highest importance to this Company. The several attempts to secure such a line have heretofore failed; on one route, from a misdirection of the means provided for the object, and on the other from absence of legislation across the tongue of land accidentally thrown into a State interested in promoting the success of rival roads. These political impediments have finally yielded to the independence of Western Virginia, but too late to avail ourselves of the favorable condition of the labor market at the commencement of the

existing war to enable the work to be pressed with vigor. Its construction has progressed steadily since the contracts have been recommenced, hut at a largely increased cost upon the estimates heretofore submitted. The line will not be ready for use before the ensuing summer.

The delay in the progress of the work has also thrown its completion into a period when the negotiation of the securities applicable to it has become difficult, and the task of supplying the funds required to prevent the work from stoppiug has necessarily fallen upon this Company in addition to the heavy expenditures it had previously voluntarily assumed to secure so important a connection by extending its own road to the south side of the Monongahela river.

The financial coudition of the Steubenville and Indiana Railroad Company, which was originally involved in embarrassment hy a failure to complete the line betwcen Pittsburgh and Steubenville, has been sucessfully reorganized, and its line extended from Newark to Columbus—(33 miles,) hy the purchase upon reasonable terms of a one-half undivided interest in the Central Ohio Railroad and its property at and betweon those places thus making the line complete hetween Steubenville and Columbus, and when the line across the State of West Virginia is opened it will form a continuous railway operated under one control from the latter City to Pittshurgh —a distance of 196 miles. Of the securities received from the Steubenville and Indiana Railroad Company for assistance heretofore extended to that Company, and to effect its reorganization, there remains in the bands of the Treasurer for sale, $1,305,000 First Mortgage Bonds, of which $775,000 hear seven per cent. interest per annum. The Western Pennsylvania and the other commutation roads, except the Pittsburgh and Steuhenville, have been brought into productive use, and it is believed that they will all eventually pay interest upon the amounts contributed to their construction, which, from reasons given in our last report, has exceeded more than two-fold the requirements of the law.

The construction of the connecting Railway, chartered to join the Pennsylvania Railway in West Philadelphia, with the Philadelphia and Trenton Road at Frankford,—a distance of seven miles,—has been commenced and will be pushed to completion as rapidly as circumstances will permit. The right of way,—one of the chief elements of its cost,—has been mostly secured. This connection will bring the line from New York to Harrisburg and the West, via Philadelphia, within twelve miles of the same distance as via Allentown, and will doubtless return to this end of our road much of the travel which the delays and obstructions in passing through this City have driven to other chanels.

It is impossible in the present condition of the currency and labor market to estimate with any precision what the demands upon the Treasury may he for completing the lines already in progress under our auspices. The cost in currency has already exceeded the estimates upon which they were undertaken. For the Philadelphia and Erie Road, there will be required during this year to place it in a condition to earn an interest upon its debt, not less than $1,250,000, in addition to $889,598 69 standing upon our books against that Company on the first of Januaay last, after exhausting its first Mortgage Bonds.

For the line between Pittsburgh and Steubenville, the sum of $800,000, and to extend the Pennsylvania Railroad to the Delaware river to meet the demands of the oil trade, which will probably be excluded by law from the present Delaware terminus, the further sum of $250,000, to which must be added for additional outfit for the Philadelphia and Erie and our own road $1,200,000, making in all $3,500,000 which may be met with but a small addition to our surplus earnings, if the result of the year's business should equal that of the past.

Notwithstanding our unremitting efforts to secure the best rails that are made, each succeeding year adds its testimony to those preceding it of the want of a better material than that now used. In addition to their rapid destruction from ordinary wear is added the risk to the trains from their frequent breakage. To obviate this, our new rails have been increased in depth to an extent (four and a half inches,) that will give them thirty per cent. additional vertical strength which, it is believed, will, with increased care in the selection of ores and the manufacture of rails, prevent further damage from this source. The steel rails introduced upon the road show no evidence of wear, but their great cost at present precludes their general introduction. The manufacture of rails with a steeled wearing surface referred to in our last annual report, has not proved successful upon a scale that would render it of practical value. The management of your railways for the last two years has been attended with unprecedented difficulties; a continually increasing business had to be met by a decreasing supply of experienced men to work them, to which, during the past year, there has been added an indiscriminate drain upon our forces to fill the armies and man the military railways of the Government. For a time it was impossible to procure for our trains even raw recruits in sufficient numbers.

The superintendence of long lines of railways having a large mixed business, involving as it does the safety of the traveler is, in ordinary times, a trust of great delicacy and responsibility, but when added to the usual risks, there is the necessity of introducing into important posts untried men, and the frequent changes that this involves to secure those that are responsible, the strain upon the endurance of the officers and faithful employees of the Company becomes as harassing and unpleasant as it is destructive to the machinery of the road.

To the difficulties mentioned, we have had also to encounter accidents arising from the inferior workmanship and materials that the great demand for locomotives and cars has introduced, which their is no practical means of ohviating when all that could be produced has heretofore been insufficient to meet the demands of the Government and the Railway Companies.

The Board, with a view to prevent the increased capital of the Company from representing property acquired at the present inflated values, have charged the large additions made during 1862, 1863 and 1864, to the equipment of the road—to the length of double track and to the warehouses, passenger-stations, shops and engine-houses, since the suspension of specie payments, to the running expenses of the road. These have amounted in the aggregate, to $5,337,866 65, a sum which it is believed will more than preserve the property of the Company represented upon its books, at its specie value.

For information in greater detail in relatton to the operations of the Company's works, the shareholders are referred to the reports of Enoch Lewis, General Superintendent.—W. H Wilson, Chief Engineer,—John P. Laird, Superintendent of Motive Power and Machinery on the Pennsylvania Railroad,—Thomas T. Wierman, Chief Engineer of the Canals, and Joseph D. Potts, General Manager of the Philadelphia and Erie Railroad, and John A. Wilson its Chief Engineer. These officers and their assistants, notwithstanding the unusual difficulties attending the operations of their respective Departments during the year, bave fulfilled the duties confided to them in a manner entirely satisfactory to the Board of Directors.

By order of the Board.

J. EDGAR THOMSON, *President.*

*General Account.* Dr.

| | | |
|---|---|---|
| To Capital Stock, as authorized by resolution of Board | $20,000,000 00 | |
| Less amount unissued | 130,940 00 | |
| | | $19,869,060 00 |
| To Bond Account, viz: | | |
| First Mortgage, six per cent. Dollar Bonds, payable 1880 | 4,980,000 00 | |
| Second Mortgage, six per cent. Dollar Bonds, payable 1875 | 2,621,000 00 | |
| Second Mortgage, six per cent. Sterling Bonds payable 1875 | 2,283,840 00 | |
| Bonds due the State of Pennsylvania, bearing five per cent. interest | 6,800,000 00 | |
| To Amount of Mortgages and Ground Rents | | |
| | | $16,681,840 00 |
| on Real Estate | 144,284 32 | |
| Total Shareholders' Capital and Funded Debt of Company | $36,698,184 32 | |
| To Accounts payable, including Pay Rolls for December, 1864 | $1,956,823 91 | |
| To Bills Payable | 408,335 71 | |
| To Dividend due to Stockholders, unpaid | 23,296 00 | |
| | | $2,393,460 62 |
| To Contingent Fund | 1,000,000 00 | |
| To Balance | 3,428,691 39 | |
| | | $43,520 336 3 |

| | | Cr. |
|---|---|---|
| By cost of Road, including Engineering, Land Damages, Fencing, Machine Shops, Engine Houses, Station and Warehouses, Car Sheds, Water Stations, Foremen and Tool Houses, and Shop Machinery, from Harrisburgh to Pittsburgh, and Station and Warehouses on the Phila. Division | $17,341,336 75 | |
| Less profits of Road, after paying interest to Stockholders up to November 1st, 1855, credited to Cost of Construction as required by charter | 589,185 70 | |
| | 16,752,150 96 | |
| By amount paid State of Pennsylvania for Philadelphia and Columbia Railroad | 6,500,000 00 | |
| By amount paid State of Pennsylvania for Canals and Portage Railroad | 1,000,000 00 | |
| The above division being made upon their presumed relative value | 7,500,000 00 | |
| Less payment made of debt to State, for purchase of Main Line, and charged to Profit and Loss | 700,000 00 | |
| | 6,800,000 00 | |
| By Equipment of Road, consisting of Locomotives, Freight, Road, and Passenger Cars | 3,385,315 15 | |
| By cost of Real Estate of Company | 2,769,705 52 | |
| By cost of Telegraph Company | 45,264 28 | |
| By Extension of Pennsylvania Railroad to Steubenville and Pittsburgh Railroad | 685,249 32 | |
| By Extension of Pennsylvania Railroad to Delaware River and Gas Works, including Wharves and Grain Elevator | 587,205 14 | |
| Total cost of Company's Roads, Canals and their appendages | 31,024,891 38 | |
| By amount or first Mortgage Bonds of the Pittsburgh and Steubenville R. R Co | 353,000 00 | |
| By 1,555 Sterling Bonds of £200 sterling each, of the Philadelphia and Erie Railroad Company remaining on hand, exclusive of 1,214 Bonds in Sinking Fund, purchased under the stipulations of the lease of the Road | 1,334,601 11 | |
| By 1,939 Shares of Stock of the Steubenville and Indiana Railroad Company | 130,696 00 | |
| By 530 Bonds of the Steubenville & Indiana Railroad Company 6 per cent | 482,651 52 | |
| By 775 Bonds of the Steubenville & Indiana Railroad Company, 7 per cent | 775,000 00 | |
| By amount of other Bonds and Stock of Municipal and Railroad Corporations | 2,881,862 89 | |
| By amount of Bills and Acc'ts receivable | 1,850,976 55 | |
| By amount due from other Roads | 192,054 52 | |
| By amount to debit of Sinking Fund | 1,615,754 79 | |
| By amount of Fuel and Materials on hand for Shops, repairs to Locomotives and Cars, and Maintenance of Way | 1,277,380 52 | |
| By amount advanced to purchase Materials, and Fuel to construct and operate the Philadelphia and Erie Railroad | 468,764 09 | |
| By Balance in hands of Agents | 762,075 98 | |
| By Balance in hands of Treasurer, December 31st, 1864 | 370,626 98 | |
| | $43,520,336 33 | |

THOMAS T. FIRTH, *Treasurer.*

## THE RAILROADS OF OHIO.

### HOW SHALL ACCIDENTS BE PREVENTED, AND THE RIGHTS OF THE PEOPLE PROTECTED?

### REPORT OF SELECT COMMITTEE.

The special committee of the Senate, appointed to inquire "what legislation is necessary to prevent accidents on railroads," &c, introduced a bill to provide for the appointment of three Commissioners to inspect the roads, and to see that the interests of the public are protected. That bill was accompanied by an elaborate report, the material portions of which are given below. The report was drawn up by Mr. Hart, the Senator from Portage, and certainly makes a strong popular statement

The Committee estimates, on the basis of the report of 1863, that we have at the present time, in round numbers about 4,800 miles of railroads in operation.

"The interests of these corporations are becoming of vast importance. It is impossible to estimate the benefits which they have conferred upon the people. They have increased the value of lands, opened up new sections to cultivation and settlement, transported the products of industry to the great markets of the country, and in many ways have added to the material wealth and prosperity of the State. They are a public benefit, and should be fostered by all needful and just legislation. While this is so, it is equally the duty of the General Assembly to protect the rights and interests of the people of the State who do business upon them.

Railroad corporations are of necessity powerful. They control vast sums of money, and put in motion mighty forces. Millions of people annually intrust their lives and persons to their care. The passenger who takes his seat in a railroad car, so far as his own safety is concerned, is helpless. The condition of the road, its track, bridges culverts, machinery, the competency of its engineers, and the rate of speed at which the train is driven, are all matters entirely within the control of the railroad company. This being the case, justice requires that in the running of trains and management of the road everything should be done with constant reference to the security of the public. There are no statistics by which the committee can ascertain the number or extent of the accidents which have occurred upon the railroads of the State during the last year, nor for any given period of time. It is well known, however, that they are of every day occurrence. In many instances the destruction of life and property is appalling.

A feeling of insecurity has taken hold of the people who travel upon the roads, so that a general inquiry is made whether there is not some remedy for the evil. What is the cause of these disasters, and how can they be prevented? The committee have no doubt but many of the accidents which have occurred, were inevitable. No human foresight could prevent them. But they are equally of the opinion that a majority of the accidents which have occurred might, and ought to have been avoided. Of the latter class are;

First, accidents resulting from the bad condition of railroads and defective machinery.

Second, accidents arising from the intemperance, incompetency and carelessness of officers and employes.

During the last four years the railroads of ths State have been driven to their utmost capacity. The wear upon them has been very great. The increase of business has resulted in a corresponding increase of profit. The receipts from all sources have been immense—amply sufficient to make all needed repairs, purchase all necessary machinery, and, in many cases, still leave large dividends for the stockholders. But unfortnnately, the stocks, which were originally held and owned by citizens of Ohio, have many of them gone into the hands of non-residents of the State—men who deal in them for purposes of speculation alone, and who have no interest in protecting either the property or the people of Ohio. Take a single illustration: Before the breaking out of the rebellion the stock of one of the leading railroads of the State, to which the attention of the Committee has been called, was worth only ten cents on the dollar. The road itself and its rolling stock were in excellent condition. Accidents seldom occurred. Since then its stock has rapidly risen in the market, until it reached thirty-six cents above par. During all this time, it has been getting more and more ont of repair, and the property of the corporation has *decreased* in value more rapidly than the stock has increased in the market. Many portions of its line are unsafe, and accidents are of frequent occurrence. The committee are of the opinion that a large majority of the accidents occurring arise from the fact that there has been a criminal neglect to make proper repairs. What has been said of a single road, may be said with equal truth in regard to many others. Of course, parties who hold the stock of these roads only for purposes of speculation, have no interest in keeping them in good condition. But the public interests, as well as sound policy, require that a portion of the earnings should annually be expended in repairs and improvements. This has been done to some degree, but not to the extent which the public safety requires.

One fruitful cause of accidents has been the breaking of bridges and culverts. The fatal accidents on the Marietta and Cincinnati Road, by which the Hon. Thos. H. Whetstone and others lost their lives, is fresh in the minds of Senators. The breaking of ice and force of water in a creek over which the road passed, carried away one of the piers of the bridge, leaving the bridge standing. A train was driven upon it and precipitated into the gorge, resulting in a melancholy distruction of life. It was said that nobody was to blame. The Company could not control the rising of the ice in the creek, nor the engineer of the train see that the pier was gone. This is true. Investigation, however, shows that the foundation of the pier was not sunk to a sufficient depth, and was underminded by the action of the water and ice. Further than this, had a vigilant watchman been stationed there, he would have known of the danger and prevented the catastrophe.

Again, accidents resulting from the incompetency and carelessness of railroad officers and employes, are of frequent occurrence. Nearly all collisions are chargeable to this cause. Many time tables require so great a rate of speed that it is impossible for heavy trains to meet their requirements. The result is that the derangement of trains is inevitable. A well regulated company, however, has not only rules for the government of its trains when they are *on* time, but when they are *out* of time, and whenever two trains collide, blame attaches somewhere. A drunken engineer or conductor may cause the destruction of his train; a faithful conductor, acting upon the information of a blundering telegraph operator, may do the same thing; and a superintendent, by establishing a time table which requires the performance of impossibilities, may be the cause of terrible disasters.

As a remedy for the evils above complained of, the committee recommend the enactment of laws requiring railroad companies to keep their roads, rolling stock and machinery at all times in good repair; to place sentinels at bridges, culverts, crossings in dangerous places; to employ none but competent persons in all positions of responsibility, and subjecting said companies, their officers, agents and employes to the payment of forfeitures and penalties for the non-performance of their duties, or the violation of any of the laws, or rules and regulations made for their government. And to this end that Commissioners be appointed to inspect the several roads of the State, their machinery and management; also to regulate the speed of trains, and make all other needful rules and regulations for the government thereof, and in case any road shall, by reason of its bad condition, become unsafe for the public, that the same be restrained from running its trains until such time as the company shall make the proper repairs and improvements.

LOCAL RATES OF FARE AND FREIGHT.

The necessity of protecting the rights of local passengers and shippers from unjust and illegal exactions is also urged by the committee. The more the control of railroad companies goes into the hands of foreign capitalists, the more will the interests of the people who live along these lines of railway be disregarded. These non-resident capitalists sacrifice the rights of local trade and travel to the interests of the through shippers and passengers, making unjust discrimination between the two classes of persons who do business on the roads of the State. The committee show that most of the roads have become subject to the general laws governing railroads. The legal rate of fare is three cents a mile, but notwithstanding that local passengers have been charged from six to twenty-five cents per mile, and, on nearly all, a greater rate than that allowed by law. The committee call attention to the following copy of instructions given to Conductors, in regard to the collection of fare, on the trains on the Pittsburg, Ft. Wayne & Chicago Railroad.

From all passengers over twelve years of age who do not hold tickets or passes, collect fare at the following rates:

| | |
|---|---|
| Under four miles | $ 25 |
| 4 and over 6 miles | 35 |
| 6 and under 8 miles | 50 |
| 8 and under 10 miles | 60 |
| 10 and under 12 miles | 75 |
| 12 and under 14 miles | 85 |
| 14 and undef 16 miles | 1 00 |
| 16 and under 18 miles | 1 10 |
| 18 and under 20 miles | 1 20 |
| 20 and under 22 miles | 1 30 |
| 22 and under 24 miles | 1 45 |
| 24 and under 26 miles | 1 60 |
| 26 and under 28 miles | 1 70 |
| 28 and under 29¾ miles | 1 75 |

Collections must he made to the first regular station at which trains stop, but in no instance must collections he made for a distance over 29¾ miles.

The above is given only as an illustration. Some other roads are charging rates nearly as high.

A like state of things prevails in regard to the transportation of local freight. * * * Only one road (the A. & G. W.) has complied during the past year, with the law of 1862, requiring roads to report to the Auditor of State. By that law Companies are prohibited from charging a greater rate of tariff than five cents per mile per tun. This law has in many instances been disregarded, and for distances of less than thirty miles, the rates are oftentimes exorbitant. A few examples will illustrate. The freight tariff from Cleveland to Newburg, (C. & P. R. R.) a distance of eight miles, is thirteen cents per one hundred weight, (first class,) or $2 60 per tun. This is at the rate of 32½ cents per mile. From Cleveland to Ravenna, thirty-eight miles, the rate is $4 per tun, or 10½ cents per mile. From Gallion to Crestline, (C. C. & C. R R) a distance of four and one-half miles, the tariff is 10 cents per hundred weight, or $2 per tun, which is at the rate of over 40 cents per mile. From Cleveland to Wellington, 36½ miles, the rate is $3.60 per tun, or over 9 cents per mile. On the Marietta & Cincinnati Railroad, the freight tariff, as reported to the Committee, is (for first class) over three and under ten miles, 20 cents per hundred weight, or at the rate of $4 per tun, which is from 40 cents and upward per mile; for a distance of from sixty to seventy miles, the charge is at the rate of $8 per tun, or from 11 to 13 cents per mile.

The Committee concede that there should he some increase for local over through freight, in view of the fact that in both cases it requires the same amount of handling. They submit, however, that the present discrimination against local shippers is too great.

The delay to which local shippers are subjected is another evil to which the Committee refer. In many instances, state the Committee, they lose the advantages of the market, and in others property is permitted to spoil for want of prompt shipment. This delay is sometimes unavoidable, on account of the large demands made by the Government upon companies, but not always. Again, railroad companies frequently incorporate into their receipts for freight a release from all damages arising from the negligence of the Company. The Committee are aware that a railroad has no legal power to exempt itself by contract from the exercise of due care and diligence; but shippers do not always understand the law, and they submit to these devices of railroad companies, feeling their injustice, but believing themselves to be without remedy.

From the foregoing considerations and facts, it is apparent that legislation is needed to protect the right of local shippers, and of those who travel upon the roads of the State. The committee, therefore recommend the enactment of laws requiring companies to furnish suitable cars for the transportation of passengers and freight; also fixing the rate of tariff to he collected, rates which shall amply compensate the railroad companies, and yet he fair and just to the people; that for the violation of the law so enacted, penalties and forfeitures should he attached and entered against companies and officers who are a party to such violation.

* * * * * *

ALPHONSO HART,
H. S. MARTIN,
WM. LANG,
Committee.

## OHIO AND MISSISSIPPI R. R. CO.

We learned some time since that the two branches of the Ohio and Mississippi Railroad Company had been completely consolidated by the perfection of the arrangements which were contemplated and carried out by the Trustees. The following article from the *Stockholder* will show *how* this has been done and what is the present condition of the property:

For the information of parties who may have acquired an interest in the above concern, we will state that, by agreement, dated December 15th, 1858, a trust was created for the benefit of the creditors and stockholders of the Ohio and Mississippi Railroad Company, (Eastern Division;) at the same time authority was specifically given also to the Trustees by the certificate-holder, to extend the operations of the trust beyond the original design, so as to embrace such other property as should he deemed by the Trustees essential or highly desirable for the protection or promotion of the interests already included in it, and to issue in payments thereof such amounts, in preferred or common certificates, or otherwise, as should be agreed upon.

Under this authority, the Trustees have purchased the entire capital stock of the Ohio & Mississippi Railroad Company of Illinois, which is the Western Division of the Broad Guage Line, known as the Ohio and Mississippi Railroad, extending from Cincinnati to St. Louis. They have also purchased, or agreed to purchase, all the mortgage or other claims against said Railroad Company, except $850,000 of its first mortgage bonds, and $750,000 of its second mortgage bonds, also all properties, rolling stock, other appurtenances, and branch roads belonging to said Railroad Company—the said Company having no floating debt, and the interest on its bonds being substantially paid, or provided for, up to January 1st, 1865.

In payment for all these purchases, the Trustees have issued, or agreed to issue, $1,279,000 in preferred ceitificates, and $9,250,000 in common certificates.

The entire stock of the Company and most of the property so purchased have already been delivered to the Trustees in form, and provision made by the Trustees for the reservation of so much of the certificates as shall be ample equivalents for any portion of the bonds agreed for which may not be delivered. The deliveries already made, however, are so full as to render the possible withholding of the remainder of inconsiderable importance to the trust.

This purchase secures to the trust the ownership, substantially, and the control, effectively, of the entire line of 340 miles of road from Cincinnati to St. Louis, and removes all hazard of a diversion or interruption of its western or St. Louis business at Vincennes.

The property purchased being through the level and fertile plains of Illinois, is, in many respects—such as cost of maintenance and operation, established local business, and prospective increase thereof—of superior value to the Eastern Division, estimated upon a basis of mileage. Its purchase, therefore, on such a basis was deemed advantageous by the Trustees, independent of other considerations, which made its possession indispensable to the Eastern Division.

The property of the Eastern Division in reference to which the trust was created, embraces the line of road from Cincinnati to Vincennes, 192 miles, and for this property, common certificates have been or may he issued, as stated in circular of April 17th, 1863, for $12,000,000, and preferred certificates $1,700,000.

The property now purchased embraces the continuation of the line from Vincennes to St. Louis, 148 miles, for which common certificates have been or may he issued for $9,250,000, and preferred certificates, $1,279,000.

The trust now holds or is entitled to, as aforesaid, substantially, all the stock, bonds, and claims of both divisions, covering the entire line of 340 miles, subject only to an equal pro-rata amount of prior lines on each, namely: On Eastern Division, 192 miles, $2,050,000 first mortgage bonds; on Western Division, 148 miles, $1,600,000 first and second mortgage bonds.

Below will he found a recapitulation of certificates issued up to December 1st, 1864.

| | PREFERRED CERTIFICATES. | COMMON CERTIFICATES. |
|---|---|---|
| On acc. of Eastern Division. | $1,138.003 45 | $10.863,915 00 |
| " Western " | 1,279.000 00 | 8.925.5..0 01 |
| Total issued | $2,417,003 45 | $19,789,465 01 |
| This amount will be increased during 1865, by the surrender to the Trustees, according to agreement, of all past due coupons on $1,595.0 0 of the $2,050 000 First Mortgage Bonds, Eastern Division, | 474,110 00 | |
| Total issue of Certificates up to Jan. 1st, 1865 | $2,891,113 45 | $19,789,465 01 |

The following table shows the gross earnings of both Divisions for the past three years, and for the past year up to December 1:

| | EASTERN DIVISION. | WESTERN DIVISION. |
|---|---|---|
| 1861 | $771,999 25 | $574,115 97 |
| 1862 | 1,122,530 27 | 797,402 22 |
| 1863 | 1,663,702 41 | 1,162 126 49 |
| 1864, first eleven months | 1,757,131 61 | 1,241,312 43 |

This statement exhibits a large increase of receipts, the gain in the first eleven months of 1864 over the corresponding period of 1863 amounting to $425,968 90.

The policy which has been pursued during the past few years, of expending in the improvement of the road and rolling stock the surplus earnings beyond the amount required for the payment of interest upon the mortgage bonds and preferred certificates, should, in the opinion of the Trustees, be continued until the road is in a condition to be worked with economy.

Uniting, as this road does, by the most direct line, two of the largest cities of the West, and forming, by various connections with the seaboard, part of a great route, its through business must continue to increase, while, by means of intersectiug roads, and the development along its own borders, the local traffic will advance in an equal if not greater proportion. These desirable results can best be secured by adhering to the plan of improvements heretofore alluded to.

The Atlantic and Great Westren Railroad has been completed to Cincinnati, but it is probable that the advantages of this connection will not be materially felt before the coming spring or summer. Upon the opening of this route, and that from Pittsburgh to Steubenville, now nearly completed, it is believed that the prospects of the Ohio aud Mississippi Railroad will be much improved.

---

Boston, Hartford and Erie Railroad.—We take the following statement in reference to this new road from the *Boston Traveler*:

"The managers of the Bostou, Hartford and Erie Railroad expect an immense through business when their line is completed, based partially on the freight business of the Erie road destined for New England. The cattle and live stock trade will be another profitable source of income, and particularly the transportation of anthracitc coal from Pennsylvania, which will he brought to Fishkill and distributed by means of this line and its connections through various parts of New England. This road offers remarkable facilities for this department of business, as it crosses eleven distinct railways at right angles, which will be serviceable as channels for the delivery of coal, and also other freight at points remote from this route. The existence of large deposits of hematite iron ore in the valley of the Fishkill, it is asserted, will be of great value, as the line of the Boston, Hartford and Erie road is located in the immediate vicinity of the ore beds, which are now wrought by companies at Poughkeepsie and Cold Spring. The present condition of this company appears highly encouragiug, as it has absorbed several minor corporations which have been and are doing a profitable business, and are daily developing in means and resources. Besides it passes through the heart of the State of Connecticut, and is too far removed from any parallel road to fear competition or any diversion from its business. In the State of New York it passes through Duchess county, the most beautiful and fertile county in the State. The Board of Directors is composed of some of the wealthiest gentlemen and most distinguished merchants in Massachusetts, New York and Connecticut, and there is evidently an abundance of capital at hand to make the enterprise a success."

## GRAND DUPLICATE.

The following Table (taken from the Auditor's Report,) of the Property, and Taxes of the State of Ohio, for six years. It is complete. It will be seen, that the *local* taxes are double those of the State; and that the taxes arising out of the War directly are $2,112,000 and that the whole amount of Taxes is $6,000,000 greater than in 1860. Probably two million of this are also for War Bounty Funds, and other similar objects, classed, under the head of "Special Purposes."

General Summary of the Grand Duplicate of the State of Ohio, for six years, beginning with 1859 and ending with 1864:

| | 1859. | 1860. | 1861. | 1862. | 1863. | 1864. |
|---|---|---|---|---|---|---|
| Number of acres of land | 25,320,842 | 25,311,705 | 25,321,275 | 25,329,580 | 25,360,407 | 25,341,345 |
| VALUATION. | | | | | | |
| Value of Lands | $438,439,600 | $492,593,587 | $494,054,639 | $494,101,182 | $495,399,666 | $498,221,589 |
| Value of Town and City Lots | 155,674,404 | 147,300,724 | 149,818,913 | 151,568,898 | 154,109,356 | 157,276,511 |
| Value of Chattel property | 251,785,947 | 248,408,290 | 248 906,532 | 213,615,212 | 286 871,922 | 351,198,016 |
| Total taxable valuation | 845,899,951 | 888,302,601 | 892,850,084 | 859,285,293 | 936,371,244 | 1,006,696,116 |
| STATE TAXES. | | | | | | |
| For Sinking Fund | $1,055,119 78 | $1,551,575 11 | $1,247,699 94 | $1,242,727 11 | $1,308,614 36 | $904,537 40 |
| For War Fund | | | 311,924 98 | 310.685 31 | 327.152 92 | 100,503 89 |
| For General Rev. Fund | 599,870 39 | 709.326 04 | 1,247.699 93 | 887,661 3 | 934,726 57 | 1,005,042 05 |
| For State Com. S. Fund | 1,257,433 44 | 1,242,811 78 | 1,249,054 43 | 1,555,220 99 | 1,216,410 78 | 1,307,829 98 |
| For Dis. S. Library Fund | 84,491 99 | | | | | |
| For Vol. Relief Fund | | | | 533,178 80 | 935,703 28 | 2.012,050 12 |
| Total State Taxes | 2,937,918 60 | 3,503,712 93 | 4,056,379 28 | 4,529,473 34 | 4,722,607 91 | 5,329,963 44 |
| COUNTY TAXES. | | | | | | |
| For County expenses | $1,305.097 69 | $1,309,137 45 | $1,326,140 43 | $1,159,949 34 | $1,111,957 11 | $1,062,038 11 |
| For Bridge purposes | 306,.03 37 | 437,538 40 | 324,490 49 | 214,466 11 | 339,224 64 | 432,373 05 |
| For Poor purposes | 277,323 12 | 260.607 20 | 342,245 10 | 227,781 54 | 264,150 30 | 395,684 58 |
| For Building purposes | 274.604 16 | 228,444 13 | 241 087 30 | 157,468 90 | 83,465 79 | 192,808 08 |
| For Road purposes | 402,293 69 | 394,424 77 | 430,253 85 | 211,864 66 | 225,148 98 | 272,380 67 |
| For R. R. purposes & debts | 463,351 80 | 538,809 50 | 538,175 85 | 812,264 52 | 648,386 99 | 627,540 68 |
| Total County Taxes | 3,151,139 74 | 3,169 021 46 | 3,222 373 02 | 2,783,735 07 | 2,671,942 81 | 2,982,885 17 |
| TOWNSHIP, SPECIAL SCHOOL, OTHER SPECIAL, CITY & TOWN TAXES. | | | | | | |
| For Township expenses | $309,635 07 | $349,360 86 | $323,236 58 | $226,453 84 | $290,234 47 | $436.736 69 |
| For Special S. purposes | 1,440.249 73 | 1,487,247 44 | 1,373,862 68 | 1,021,011 52 | 1 226.046 85 | 1.630,745 54 |
| For other special " | 245,860 57 | 349,236 33 | 535,028 45 | 279,743 04 | 1,202,266 60 | 3,975,698 07 |
| For city, town & borough purposes | 1,471,958 06 | 1,506,483 86 | 1,560,197 88 | 1,322,092 52 | 1,455,736 16 | 1,976,310 98 |
| Total Township & City Special purposes | 3,457,703 43 | 3,691,928 49 | 3,792,375 59 | 2.849,300 92 | 4,174,284 08 | 8,019,491 28 |
| Total county and other local taxes | $6,618,843 17 | $6,860,949 95 | $7,014,748 61 | $5.633 035 99 | $6,846,226 89 | $11.002,376 45 |
| Delinquencies & forfeitures | $423,576 45 | $453,013 46 | $585,685 03 | $372,776 30 | $290,738 88 | $263,299 46 |
| Total taxes for all purposes, including delinquencies | $10,045,338 22 | $10,817.676 34 | $11,656,813 92 | $10,135,285 63 | $11.859.573 68 | $16,505,639 35 |

## A VIEW OF THE NATIONAL BANK SYSTEM.

We take the following view of the National Banks from the *Merchants Magazine*. There is little doubt, that the old Banks of the country, will soon be merged in the new, for reasons given below, it will be seen, that the circulation of the new Banks is not yet very great. The average is about $120,000 to each bank.

In our last number we remarked upon the fact that the Banks of Boston and Philadelphia, with those of New York, were disposed, and some of them were taking steps to come under the national law. This movement has since become more general for reasons then stated, and the chances now are that all the State Banks will merge themselves under the new law. The advantages to stockholders in selling the gold on hand, dividing the surplus, and beginning anew under a system which never contemplates a return to specie payments, are apparently very great. The progress of the Bauks has been as follows:

| | No. banks. | Capital. | Circulation. |
|---|---|---|---|
| Oct. 22 | 556 | $98,111,420 | $56,858,036 |
| " 29 | 560 | 104,746,070 | 58,734,180 |
| Nov. 5 | 564 | 105,381,070 | 60,450,100 |
| " 12 | 568 | 106,540,750 | 62,350,320 |
| " 19 | 578 | 108,440,870 | 64,529,470 |
| " 26 | 587 | 110,950,870 | 68,535,070 |
| Dec. 3 | 601 | 115,710,870 | 70,507,840 |
| " 19 | 620 | 121,256,020 | 72,383,840 |
| " 17 | 631 | 128,151,020 | 72,383,740 |

This rapid increase involves the adhesion of the old Banks to the new system, into which the Comptroller of the currency confidently expects the absorption of all of them. It was rumored, therefore, that the further formation of new Banks had been discouraged by the Comptroller, and consequently he published the following denial of the rumor:

"The Comptroller has given no such notice. In view of the fact that State Banks are being rapidly organized under the National Currency Act, and that in the Eastern States there is no deficiency, but rather an excess of banking capital, he has considered it to be his duty to discourage, in many instances, new organizations, and in more instances, the increase of the capital of those already in existence. It is the aim of the Comptroller to introduce the National Bank note circulation without adding to the present inflation; but it is not in his power to prevent new organizations, nor is it his desire to do so, in places where the legitimate business of the country seems to require additional banking facilities."

The Secretary of the Treasury in relation to the circulation of the old Banks stated that the amount out in July, 1864, was $144,000,000. To extend the new system to $300,000,000 would involve an increase of $156,000,000 in the currency, even if the old note circulation should be entirely withdrawn. The old Banks, especially those in cities, hold stocks enough to lodge with the Comptroller for circulation without purchasing any more, and it is evidently for their interest to utilize the stock by obtaining circulation for it.

---

—The Grand Trunk road earned the week ending February 18:

| | |
|---|---|
| 1864 | $80,216 |
| 1865 | 90,426 |
| Increase | $10,210 |

## NEW JERSEY RAILROADS.

REPORTS TO THE LEGISLATURE.

We are indebted to Wm. Perry, Esq, for the following synopsis of the Annual Reports of the Railroads of New Jersey, presented to the Legislature, on the 22d ult.

CENTRAL RAILROAD COMPANY OF NEW JERSEY.

Capital stock, $6,500,000; first mortgage bonds, $1,400,000; second mortgage bonds, $600,000; quarterly dividend, 2½ per cent., due June 16th, $159,117.50; interest accrued not yet due, $47,833.33; accounts payable, $429,399.40; balance to credits of general fund, $628,254.87; value of road and appendages, $9,764,589.49; receipts, $2,537,184.45; expenses, $1,231,554.54; passengers carried, 698,808; passengers carried one mile, 19,397,115.

NORTH BRANCH RAILROAD COMPANY.

Work done to January 1st, under head of grading and construction account, $342,048.53; paid on account of right of way, $52,606.74; amount received on capital stock, $340,000. The road is leased at the annual rent of 6 per cent. on its capital stock to the Central Railroad Company, who have operated it since July last.

WARREN RAILROAD COMPANY.

Capital stock and actually paid in, $1,408,300; first mortgage bonds (1875) sold $600,000; earnings of the road, $209,022.04; expenses, $129,512.12; passengers carried 76,306½.

THE JOINT COMPANIES.

| | |
|---|---|
| Earnings of Railroad for 1864 | $4,634,056 16 |
| Earnings of Canal for 1864 | 1,065,024 26 |
| | $5,699,980 42 |
| Expenses of Railroad | $4,278,795 49 |
| Expenses of Canal | 280,397 29 |
| Current net of Railroad | 784,626 97 |
| Current net of Canal | 356,100 67 |
| | $5,699,980 42 |

FREEHOLD AND JAMESBURG AGRICULTURAL R. R.

Capital stock, $230,840.80; cost of road and equipment, $230,100.37; receipts, $41,350.71; expenses, $27,719.76; dividends paid, $16,809.11; passengers carried, 61,234. The extension of the road to Dean's Pond has been commenced.

BELVIDERE DELAWARE RAILROAD.

Capital stock, 997,112 24; funded debt, $2,193,000.00; special loans, $120,072.10; temporary loans, $132,512.43; cost of road and equipments, $3,386,285 27; receipts, $484,444.15; receipts from Flemington road $501,885.48; expenses of working road, $367,057.64; expenses of working Flemington road, $16,913.95. No dividends.

MORRIS CANAL AND BANKING COMPANY.

Capital stock, $2,202,000; funded debt, $831,279.28; cost of canal and appurtenances, $3,011,262 64; paid for repairs past year, $130,719.93; cost of navigation and employees, $48,570.64; superintendence and management, $31,874.38; earnings, $597,004.71; dividends, $514,625.

ROCKY HILL RAILROAD COMPANY.

Capital stock, $43,495; funded debt none; other debts, $300; cost of road to date, $41,615.38. The road has been worked but a few weeks and no report is made of receipts and expenses.

BURLINGTON COUNTY RAILROAD COMPANY.

Capital stock actually paid in, $177,650; mortgage and other loans, $76,800; cost of road and equipments, $250,000; receipts, $57,925.89; disbursements, $61,967.20.

CAMDEN AND ATLANTIC RAILROAD COMPANY.

Capital stock paid in, $1,062,243.06; funded debt, $1,035,275.80; floating debt, $123,929.81; cost of road and equipment, $1,881,414.32; interest paid during year, $73,507 87; receipts, $231,466.11; expenses, $160,359.95.

SALEM RAILROAD COMPANY.

Capital stock, $180,550; bonded debt, $100,000; cost of road and equipment, $250,777 85; receipts, $34,439.25; expenses, $27,826.93. A guaranteed dividend of three per cent. has been paid in cash.

CAPE MAY AND MILLVILLE COMPANY.

Capital stock, $300,000; bonded debt, $200,000; other debt, $124,064.20; cost of road and equipment, $622,746.01; receipts, $63,749.57; expenses, $42,591.52.

MILLVILLE AND GLASSBORO' COMPANY.

Capital stock. $168,198.36; funded debt, $3,750; floating debt, $28; cost of road and equipment, $403,035.77. Paid one dividend of 3 per cent.

WEST JERSEY RAILROAD COMPANY.

Capital stock, $588,400; loaned at 6 per cent., $700,000; total cost of road, $1,068,685.12; other capital expenditures, $392,564; receipts, $207,952.34: expenses, $116,408.17.

RARITAN AND DELAWARE BAY R. R. COMPANY.

Capital stock, $2,360,700; first mortgage bonds, $1,000,000; second mortgage bonds, $250,000; convertible bonds, $140,000; Toms River (branch bonds), $39,900; other debts, $544,426.38; cost of road and equipment, $2,596,481.11; number of passengers carried, 171,929; receipts, $229,475.83; expenses, $256,275.18.

NEW JERSEY RAILROAD COMPANY.

Capital stock, $4,397,800; funded debt, $635,000; floating debt, $145,000: profit and loss, surplus earnings represented by permanent improvements, $594,542.13; dividend paid, $219,887.50; cost of road and equipments, $4,271,809.30; receipts, $1,563,606.70; expenses, $785,980.28; passengers, 3,310,940½; passengers over whole line 73,387½; persons killed by accidents, 28.

MILLSTONE AND NEW BRUNSWICK COMPANY.

Capital stock and floating debt, $111,114; passengers carried, 20,479; receipts, $12,511.46; expenses, $7,325.57.

PATERSON AND RAMAPO COMPANY.

Capital stock, $248,000; funded debt, $85,000; bonds redeemed, $15,000; shipments, $350,000; income rents from Erie Railroad, $26,500; dividends paid, $13,640; expenses for contingencies, taxes, &c., $2,553.99; paid sinking fund to redeem bonds. $5,000; paid interest on bonds, $5,950.

MORRIS AND ESSEX RAILROAD COMPANY.

Capital stock, $3,041,950: funded debt, $1,164,500; floating debt, $31,200; contingent fund, $299,266.07; cost of road and appendages, $4,057,275.97; receipts, $570,764 03; expenses, $436,569.37; dividends paid, $121,440.12; passengers, 1,032,973.

NEWARK AND BLOOMFIELD COMPANY.

Capital stock, $103,890; cost of road and equipment, $112,151.36; receipts, $31,499.33; expenses, $30,583.07; one dividend of five per cent. paid, $5,180; passengers, 155,650.

SUSSEX RAILROAD COMPANY.

Capital stock, $192,900; funded debt, $200,000; floating debt, $4,924.17; cost of road and equipment, $397,824 17 receipts, $45,325.50; expenses, $26,602.64; paid interest on debt, $13,107.09. No dividends.

HACKENSACK AND NEW YORK RAILROAD COMPANY

Capital stock, $94,600; funded debt, $40,000; paid on construction from receipts of 1862, $3,508.66; in 1863, $3,688.89; receipts, $40,485.94; expenses, $36,842.77. No dividends.

A PNEUMATIC EXPRESS.—A bill is in the Legislature of this State to incorporate a company to construct a pneumatic dispatch-tube, for parcels under the patent of Mr. Needham. The tube is to be six feet high, and to make a circuit of several miles; and the belt of air in it is to be kept constantly in motion, passing the stations by turn-outs. This plan differs in this respect from the packages pneumatic express in London, in which the whole column of air has to be started and stopped at every passage of the car. The tube, or tunnel, is to be of brick; and the large size is to enable men to go into it to keep it in order. The continued motion of the air will avoid the loss of power necessary to start and stop so great a weight at each passage of the car; and it is expected that it will therefore work with less power than is required in the London tunnel, the diameter of which is only four feet.

## MONETARY AND COMMERCIAL.

In regard to the amount of money and the demand for it, things have remained much the same as they were last week. The volume of currency is slowly increasing; but bankers have no such abundance as to allow of free discounts. The Government is slow in paying up vouchers, and those due on this month are as low as 93. Domestic products are slow in shipping to other markets. The result of this state of things is, that there is a very decided demand for money, and no surplus of currency to meet it. Rates of interest are of course high. Bankers discount to regular customers who have claims upon them at 10 per cent.; but the outside rate is from 10 to 18. One banker said he could have abundance of paper at 18 per cent.; but would not do it.

Gold is going steadily but slowly downwards. The following are the rates of gold during the past week:

| | Opening. | Highest. | Lowest. | Closing. |
|---|---|---|---|---|
| March 2 | 196¼ | 198⅝ | 196¼ | 198 |
| " 3 | 198½ | 199⅛ | 198½ | 199 |
| " 4 | 198 | 200 | 198 | 200 |
| " 6 | 198⅝ | 198⅞ | 198⅝ | 198⅝ |
| " 7 | 199 | —— | —— | 197½ |
| " 8 | 197¾ | —— | —— | 195½ |

The fall in the week has not been very great, but in ten days 6 per cent.—quite enough to disturb the prices of commodities, and create uncertainty in transactions relative to domestic produce. Flour feels the fall of gold more seriously than any article. Merchantable flour has fallen the last three months $1.50 per barrel.

Eastern exchange is more abundant, so that most of the dealers are drawing for customers at 1 10c. premium.

QUOTATIONS.

| | Buying. | Selling. |
|---|---|---|
| N. Y. Exchange | 50@75c. ℘ M. prem. | ¼ prem |
| Philadelphia | 50@75c. ℘ M. | ¼ prem |
| Boston | 50@75c. ℘ M. | ¼ prem |
| Baltimore | 1-10c. dis. | par. |
| Gold | 95@96c. prem. | 98@99 prem |
| Silver | 83@85c. prem. | 88@90 prem |
| Vouchers, city | 2@7c. dis. | |
| Vouchers, coun'y | 8@15c dis. | |
| Certificates | 1@2 dis. | par. |

HUGH MCCULLOUGH, recently Comptroller of the Treasury, and formerly President of the State Bank of Indiana, has been appointed, by the President, and confirmed by the Senate as Secretary of the Treasury. Mr. McCollough has enjoyed a high financial reputation in all the situations in which he has been placed, and has now the confidence of the people.

"Congress has passed a bill authorizing an additional loan of six hundred million dollars, and giving the Secretary of the Treasury the power to sell bonds, for coin or other currency, in this or any other country and to contract whether the interest shall be paid in coin, or in other lawful money of the United States; if in coin, the interest is to be six per centum, and if in currency seven and three-tenths per centum, per annum. The act also prohibits the issue of any more legal tender currency. The bonds are exempt from State or municipal taxation. Mr. McCollough is reported to have expressed his belief that this bill will enable him to borrow all the money needed, and that it will not be necessary to increase the currency by the further issue of interest-bearing notes, which he is opposed to if it can be avoided. Indeed, the loan bill above noticed, provides that the bonds may be issued to pay contractors, and in exchange for certificates of indebtedness, so that except to pay the army and navy, the other demands may be met with these bonds."

The Government can, beyond doubt, get all the money it wants; and the only question is, the *mode* in which it can get it. The 7 3-10ths are at present popular, and we believe are the best mode now of borrowing. And, in fact, if the price of gold should fall so as to be not more than 20 per cent., and that is not improbable, the 7 3-10ths will be far the best stock out.

Gold has fallen with the steady advance and progress of our armies. In all probability, they will continue to advance—and to conquer—till the rebellion is thoroughly crushed. It will, perhaps, be fortunate that the full settlement of affairs can not be made at once; and therefore, the financial and commercial affairs of the country can not settle down at once on a gold basis. There will, we think, be no such sudden revulsion in the country as many persons expect. Things will gradually come right.

The startling and interesting enterprises of the day now are the petroleum companies which arise on all sides of us. The great wave of oil speculation has reached this city and we haer of more than a dozen companies just formed. The fever is still rising.

## STAMP DUTIES.

The following is an abridgment of the new Tax Law which goes into operation August 1, 1864:

AFFIDAVITS in suits or legal proceedings shall be exempt from stamp duty.

AGREEMENT or contract, &c.—for every sheet or piece of paper upon which either of the same shall be written ..... 5 cts.

BANK CHECK, draft, or order—Drawn upon any bank, banker or trust company, or for any sum exceeding $10, drawn upon any other person or persons, companies or corporations, at sight or on demand ..... 2 cts.

BILL OF EXCHANGE (Inland)—for a sum not exceeding $100 ..... 5 cts.

For every addition $100, or fractional part thereof. 5 cts.

BILL OF EXCHANGE (Foreign) or Letter of Credit—drawn in but payable out of the United States, if drawn singly or otherwise than in sets, shall pay the same rates of duty as inland bills.

If drawn in sets of three or more: for every bill of each set, where the sum made payable shall not exceed $100 ..... 2 cts.

And for every additional $100 or fractional part thereof ..... 2 cts.

BILL OF LADING or Receipt, for any merchandise or effects, to be exported from the United States to any foreign port ..... 10 cts.

BILL OF SALE, by which any ship or vessel shall be conveyed to any other person, when the consideration shall not exceed $500 ..... 50 cts.

Exceeding $500 and not exceeding $1,000 ..... $1 00

Exceeding $1,000, for every additional amount of $500 or fractional part thereof ..... 50 cts.

BOND—For indemnifying any person for the payment of any sum of money, when the money ultimately recoverable thereupon is $1 000 or less ..... 50 cts.

When in excess of $1,000, for each $1,000 or fraction ..... 50 cts.

BOND for due execution of duties of office ..... $1 00

BOND of any description, other than such as may be required in legal proceedings, or used in connection with mortgage deeds, and not otherwise charged in this schedule ..... 25 cts.

CERTIFICATE of stock in any incorporated company ..... 25 cts.

CERTIFICATE of profits, showing an interest in the property of any incorporated company, if for a sum not less than $10 and not exceeding $50 ..... 10 cts.

Exceeding $50 and not exceeding $1,000 ..... 25 cts.

Exceeding $1,000 for every additional $1,000 or fractional part thereof ..... 25 cts.

CERTIFICATE.—Any certificate of damage or otherwise, issued by any port warden, marine surveyor, or other person acting as such ..... 25 cts.

CERTIFICATE of deposit of any sum of money in any bank or trust company, or with any banker, if for a sum not exceeding $100 ..... 2 cts.

For a sum exceeding $100 ..... 5 cts.

CERTIFICATE of any other description than those specified ..... 5 cts.

CHARTER-PARTY.—Contract or agreement for the charter of any ship or vessel, or steamer, between the captain, master, owner or agent, of the registered tonnage of such ship, or vessel, or steamer, does not exceed 150 tons ..... $1 00

Exceeding 150 and not exceeding 300 tons ..... $3 00

Exceeding 300 and not exceeding 600 tons ..... $5 00

Exceeding 600 tons ..... $10 00

CONTRACT.—Broker's note, or memorandum of sale of merchandise, stocks, bonds, exchange, notes of hand, real estate or property of any kind, issued by brokers, each note or memorandum of sale ..... 10 cts.

CONVEYANCE.—Deed, whereby any lands, tenements, or other realty sold, shall be granted, assigned, &c., when the consideration or value does not exceed $500 ..... 50 cts.

When the consideration exceeds $500, and does not exceed $1,000 ..... $1 00

And for every additional $500, or fractional part thereof, in excess of $1,000 ..... 50 cts.

ENTRY of any goods, wares or merchandise at any Custom House, either for consumption or warehousing, not exceeding $100 in value ..... 25 cts.

Exceeding $100 and not exceeding $500 in value. 50 cts

Exceeding $500 in value ..... $1 00

ENTRY for the withdrawal of any goods or merchandise from bonded warehouse ..... 50 cts.

GAUGERS' RETURNS, if for a quantity not exceeding 500 gallons gross ..... 10 cts.

Exceeding 500 gallons gross ..... 25 cts.

INSURANCE (Life). Policy of insurance, or other instrument whereby any insurance shall be made upon any life or lives; when the amount insured shall not exceed $1,000 ..... 25 cts.

Exceeding $100 and not exceeding $5,000 ..... 50 cts.

Exceeding $5,000 ..... $1 00

INSURANCE (Marine, Inland and Fire). Each policy of insurance, or other instrument, the premium upon which does not exceed $10 ..... 10 cts.

Exceeding $10 and not exceeding $50 ..... 25 cts.

Exceeding $50 ..... 50 cts.

LEASE, Agreement or Contract for the hire, use or rent of any land, tenement, or portion thereof, where the rent or rental value is $300 per annum or less ..... 50 cts.

Where the rent or rental value exceeds the sum of $300 per annum, for each additional $200 or fractional part thereof in excess of $300 ..... 50 cts.

MANIFEST for Custom House entry or clearance of the cargo of any ship, vessel or steamer for any foreign port: if the registered tonnage of such ship, vessel or steamer does not exceed three hundred tons. $1 00

Exceeding three hundred tons and not exceeding six hundred tons ..... $3 00

Exceeding six hundred tons ..... $5 00

MEASURERS' RETURNS, if for a quantity not exceeding 1,000 bushels ..... 10 cts.

Exceeding 1,000 bushels ..... 25 cts.

MORTGAGE of lands, estate or property, real or personal, heritable or movable whatsoever, or any personal bond as security for the payment of any definite or certain sum of money exceeding $100 and not exceeding $500 ..... 50 cts.

Exceeding $500 and not exceeding $1,000 ..... $1 00

And for every additional $500 or fractional part thereof in excess of $1,000 ..... 50 cts.

*Provided*, That upon each and every assignment or transfer of a mortgage, lease, or policy of insurance, or the renewal or continuance of any agreement, contract or charter, by letter or otherwise, a stamp duty shall be required and paid equal to that imposed on the original instrument.

PASSAGE TICKET by any vessel from a port in the United States to a foreign port, not exceeding $35 ..... 50 cts.

Exceeding $35 and not exceeding $50 ..... $1 00

And for every additional $50 or fractional part thereof in excess of $50 ..... $1 00

POWER OF ATTORNEY ..... 25 cts.

Power of Attorney of proxy for voting at any election for officers of any incorporated company .... 10 cts.

Power of Attorney to sell and convey real estate, or to rent or lease the same ..... $1 00

PROBATE OF WILL, or Letters of Administration: where the estate and effects for and in respect of which such probate or letters of administration applied for shall be sworn or declared not to exceed the value of $2,000 ..... $1 00

Exceeding $2 000, for every additional $1,000 or fractional part thereof in excess of $2,000 ..... 50 cts.

PROTEST.—Upon the protest of every note, bill of exchange, acceptance, check or draft, or any marine protest ..... 25 cts.

WAREHOUSE RECEIPTS for property, goods, wares or merchandise, not otherwise provided for in any public or private warehouse, when the property or goods so deposited or stored shall not exceed in value $500 ..... 10 cts.

Exceeding in value $500 and not exceeding $1,000. 20 cts.

Exceeding in value $1,000, for every additional $1,000 ..... 10 cts.

RECEIPTS for the payment of any sum of moneys or debt due exceeding $20, not being for satisfaction of any mortgage or judgment or decree of court, and a receipt for the delivery of any property ..... 2 cts.

WAREHOUSE RECEIPT for any goods, merchandise, or property of any kind, not otherwise provided for, held on storage in any public or private warehouse or yard ..... 25 cts.

WEIGHERS' RETURNS, if for a weight not exceeding five thousand pounds ..... 10 cts.

Exceeding five thousand pounds ..... 25 cts.

WRIT, or other original process by which any suit is commenced in any court of record ..... 50 cts.

Where the amount claimed in a writ issued by a court not of record, is $100 or over ..... 50 cts.

Upon every confession of judgment, cognovit, for $100 or over (except in those cases where the tax for the writ of a commencement of a suit has been paid. 50 cts.

Writs or other process on appeals from justice courts or other courts of an inferior jurisdiction to a court of record ..... 50 cts.

WARRANT OF DISTRESS, when the amount of rent claimed does not exceed $100 ..... 25 cts.

When the amount claimed exceeds $100 ..... 50 cts.

*Provided* That no writ, summons or other process issued by and returnable to a Justice of the Peace, except as hereinbefore provided, or by any police or municipal court having no larger jurisdiction as to the amount of damages it may render than a Justice of the Peace in the same State, or issued in any criminal or other suits commenced by the United States or any State, shall be subject to the payment of stamp duties; *and provided further*, that the stamp duties imposed by the schedule B on manifests, bills of lading and passage tickets, shall not apply to steamboats or other vessels plying between ports of the United States and ports in British North America.

### MEDICINES OR PREPARATIONS.

For and upon every packet, box, bottle, pot, phial or other inclosure, where such packet, box, bottle, pot, phial or other inclosure, with its contents, shall not exceed, at the retail price or value, the sum of 25 cents ..... 1 ct.

Exceeding 25 and not exceeding 50 cents ..... 2 cts

Exceeding 50 and not exceeding 75 cents ..... 3 cts.

Exceeding 75 cents and not exceeding $1 ..... 4 cts.

Where such packet, box bottle or other inclosure, with its contents, shall exceed the retail price of $1, for each and every 50 cents or fractional part thereof over and above the $1, an additional ..... 2 cts.

For and upon every packet, box, bottle or other inclosure, containing any essence, extract, toilet water, cosmetic, hair oil, pomade, hair dressing, hair restorative, hair dye, tooth wash, dentifrice, tooth paste, aromatic cachous, or any similar articles, by whatsoever name the same heretofore have been, now are, or hereafter be called, where such packet, box, bottle or other inclosure, with its contents, shall not exceed, at the retail price, the sum of 25 cents ..... 1 ct

Exceeding 25 and not exceeding 50 cents ..... 2 cts.

Exceeding 50 and not exceeding 75 cents ..... 3 cts

Exceeding 75 cents and not exceeding $1 ..... 4 cts

Photographs, ambrotypes, daguerreotypes or any sun picture, except as hereinbefore provided—upon

each and every picture nf which the retail price shall not exceed 25 cents..... 2 cts.
Exceeding the retail price of 25 cents and not exceeding the sum of 50 cents..... 3 cts.
Exceeding the retail price of 50 cents and not exceeding $1..... 5 ts
Exceeding the retail price of $1, for every additional dollar or fractional part thereof..... 5 cts.
Playing Cards—For and upon every pack, of whatever uumber, when the retail price per pack does not exceed 18 cents..... 2 cts.
Exceeding the retail price of 18 cents and not exceeding 25 cents per pack..... 4 cts.
Exceeding the retail price of 25 cents and not exceeding 50 cents per pack..... 10 cts.
Exceeding the retail price of 50 cents and not exceeding $1 per pack..... 15 cts.
Exceeding the retail price of $1, for every addition $150 cents or fractional part thereof, in excess nf a1..... 5 cts
Where such packet, box, bottle or other inclosure, with its contents, shall exceed the rctail price of $1, for each and every 50 cents, or fractional part thereof, nver and above the $1, additional..... 2 cts.
Friction nr lucifer matc es, for each parcel or package..... 1 ct.
When in parcels or packages containing more than one hundred and not less than two hundred matches, for each parcel or package..... 2 cts.
And for every additional one hundred matches or fractional part thereof..... 1 ct.
For all cigar lights and wax tapers—double the rates herein imposed upon friction or lucifer matches.
*Provided*, That the stamp duties herein provide l for on friction or lucifer matches made in part f wood, or on cigar lights or wax tapers, shall not be imposed until Sept. 1, 1864; but until that time the tax shall be assessed and collected as heretofore; and nn and after said Sept. 1 every package or parcel sold by any person, firm, company or corporat on, shall be stamped as herein required.

—The Racine and Mississippi Road earned in January?

| | |
|---|---|
| 1864 | $27,909 |
| 1865 | 44,715 |
| Increase | $16,806 |

—The Racine and Mississippi road earned the third week in February:

| | |
|---|---|
| 1864 | $7,899 |
| 1865 | 9,674 |
| Increase | $1,775 |


WRIGHTSON & CO.

BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO.


## CHANGE OF TIME.

## Indianapolis and Cincinnati



THREE THROUGH TRAINS DAILY, as follows:

| | Leave. | Arrive. |
|---|---|---|
| St. Lnuis and Chicago Express | 6.30 A. M. | 10.15 A. M. |
| Springfield & St. Joseph Express | 1.00 P. M. | 5.00 P. M. |
| St. Louis & Chicagn Express | 4.00 P. M. | 1.30 A. M |

Sleeping cars hy this train for St. Louis and Chicago

ACCOMMNDATION TRAINS.

| | Leave. | Arrive. |
|---|---|---|
| Lawrenceburg Accommodation | 4.25 P. M | 8 35 A. M. |
| Harrisnn | 9.00 A. M. | 3.00 P. M. |

Through Tickets can be nhtained at the Spencer House, Burnet House and Gibson House Offices, and at the Depot.

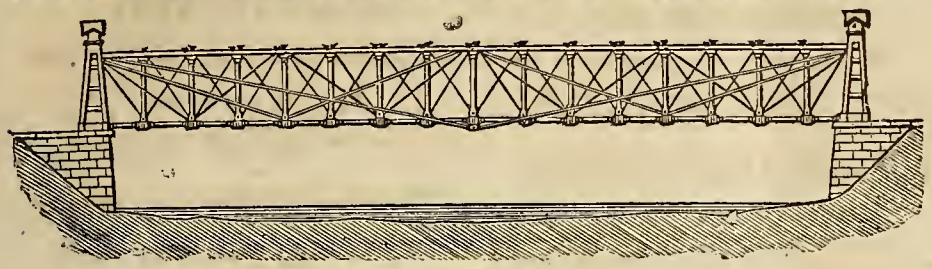
☞ Passenger Depnt corner of Pearl and John streets, s within a few squares of all the principal Hotels in the y.

ROBERT MEEK, Supt.

## General Ticket Agents of the Principal Railroads.

Atlantic & Great Western Railway.....T. H. Goodman, General Ticket Agent, Meadville, a.
Buffalo & Erie.....J. A. Burch, General Ticket Agent, Buffalo, N. Y.
Buffaln, New York & Erie.....Wm. L. Doyle " " " Buffalo, N. Y.
Buffalo & Lake Huron.....Thos. W. Bussell, " " Brantford, C. W.
Burlington & Missouri River Railway..L. Carper, " " " Burlington, Iowa,
Boston & Worcester.....L. K. Miles, " " " Boston, Mass
Bellefontaine Railway Line.....Chas. Wnod, Gen. Ticket Agent, Terre Haute, Ind
Boston & Prov dence.....James Dailey, Ticket Agent. Boston, Mass.
Baltimore & Ohio.....L. M Cole " Baltimore, Md.
Bost. Concord & Mont. and Wh. M....J. L. Rogers, " Plymouth, N. H.
Chicago, Mil.. LaCrosse & St. Paul.....A. V. H. Carpenter, Gen. Ticket Agent, Milwaukee Wis.
Chicago, Burlington & Quincy.....Samuel Powell, General Ticket Agent. Chicago, Ill.
Chicago & R. Island and Miss. & Mo...W. L. St. John, " " " Chicago, Ill.
Chicago, Alton & St. Louis.....Joseph Price, Treasurer, Chicago, Ill.
Chicago & North Western.....E. P. Cutler, General Ticket Agent, Chicago, Ill.
Connecticut & Passumpsic Rivers....Nathaniel P. Lovering, " " " St. Johnshury, Vt.
Chicago, Iowa & Nebraska.....Jas. M. Ham, General Passenger Agent. Clinton, Iowa,
Central Railway of New Jersey.....H. P Baldwin. General Ticket Agent, 69 Wall Street, N. Y.
Catawissa Railway Cn.....H. H. McDonnell. Freight and Passenger Accountant, Philadelphia, Pa.
Central Ohio.....John W. Brown, General Ticket Agent. Columbus, Ohio.
Columbus & Indianapolis R R.....F. Chandler, " " " Indianapnlis, Ind.
Cincinnati, & Zanesville.....E. S. Lowe. " " " Cincinnati "
Cincinnati & Chicago Air-Line.....L. H. Walkley, " " " Richmond, Ind
Cheshire.....R. Stewart, " " " Keene. N. H.
Connecticut River Railway.....E. Morgan " " " Springfield, Mass.
Cleveland, Paioesville & Ashtabula....J. W. Cary, " " " Cleveland, Ohin.
Cleveland & Pittsburg.....F R. Myers, " " " " "
Cleveland & Toledo.....John U. Parsons, " " " " "
Cleveland, Columbus & Cincinnati....H. C. Marshall, " " " " "
Cincinnati, Hamilton & Dayton.....P. W. Strader, " " " Cincinnati, "
Concord, Manchester & Lawrence.....Geo. G. Sanborn, " " " Concord N. H.
Dayton & Michigan.....P. W. Strader, " " " Cincinnati. Ohio
Dubuque, & South-Western.....Geo. W. Farley, Receiver, Dubuque, Iowa.
Duhuque & Sioux City.....J. A. Pinto, General Ticket Agent. Dubuque, Iowa.
Detroit & Milwaukee.....Jas. H. Muir, Auditor, Detroit, Mich.
Erie Railway.....Wm. R. Barr. General Passenger Agent. New York.
Eaton & Hamilton.....E. W. McGuire, General Ticket Agent, Eaton, Ohin
Evansville & Crawfordsville.....J. E. Martin, Secretary, Evansville, Ind.
Elmira & Williamsport.....Edmund B. Smith, General Ticket Agent. Elmira, N. Y
East Pennsylvania.....Philip M. Ermentrout, " " " Reading, Pa.
Erie & Pittsburg.....J. A. Burch, " " " Buffalo, N. Y.
Fitchburg Railway.....H. F. Whitcomh, " " " Boston, Mass.
Great Central Railway Line.....F. Chandler, General Ticket Agent, Indianapolis, Ind,
Great Western Railway (Canada).....J. Charlton, Auditor, Hamilton, C. W.
Great Western Railway Cn of 1859.....W. D. Richardson, General Ticket Agent, Springfield, Ill
Grand Trunk Railway (Canada).....Henry Shackell, Auditor, Montreal, C. E
Hudson River Railway.....C. H. Kendrick, General Ticket Agent. New York.
Hannibal & St. Joseph.....P. B. Groat, " " " Hannibal, Mo.
Indianapolis & Cincinnati.....F. B. Lord, " " " Indianapolis, Ind.
Indianapolis, Peru & Chicago.....V. T. Malott, Treasurer, Indianapolis, Ind.
Illinois Central.....Wm. P. Johnson, General Passenger Agent, Chicago, Ill.
Indiana Central.....F. Chandler, General Ticket Agent, Indianapolis, Ind.
Jeffersonville.....Jas. Ferrier " " " Jeffersonville, Ind.
Kentucky Central.....H. P. Ransom, General Ticket Agent, Covington, Ky.
Keokuk, Ft. Des Moines & Minn.....John Givin, " " " Keoknk, Inwa.
Little Miami and Columbus & Xenia..P. W. Strader " " " Cincinnati, Ohin.
Logansport, Peoria & Burlington.....E. M. Whitlock, Chief Clerk, Peoria, Ill.
La Crosse & Milwaukee.....J M. Kimball, General Ticket Agent, Milwaukee, Wis.
Louisv. & Frankfort and Lex. & F....Henry Steffee, General Freight and Ticket Agent, Louisville, K
Lafayette & Indianapolis.....John M. Kerper, General Ticket Agent, Lafayette, Ind.
Louisville, New Albany & Chicago....J. G. Williamson, " " " New Albany, Ind
Louisville & Nashville.....D. A. Kean, Chief Clerk, Louisville, Ky.
Michigan Central.....Thos. Frazer, General Ticket Agent, Detroit, Mich.
Mich. Southern & Northern Indiana..C. P. Leland, " " " Toledo, Ohio.
Milwaukee & Prairie du Chien.....E. P. Bacon, " " " " "
Milwaukee & St. Paul.....F. W. Spear, General Ticket Agent. Milwaukee, Wis.
Marietta & Cincinnati.....Chas. F. Low. General Ticket Agent, Chillicothe. Ohio.
Montreal & Champlain.....J. F. Barnard, " " " Montreal, C. E.
New York Central.....E. F. Folger, Chief Clerk, Albany, New York.
New York, Harlem & Albany.....R. R. Freeman. General Ticket Agent, New York.
Norwich & Worcester.....Edward T. Clapp, Secretary, Norwich, Conn.
Northern Central.....Edward S. Young, Geoeral Ticket Agent, Baltimore, Md.
New York & New Haven.....Jacob Mendel, " " " New York.
New Haven & Northampton.....E. A. Ray, Supcrintendent and Clerk, Westfield, M
North Missouri.....Jas. H. Concannon, General Ticket Agent, St. Lonis, Mn.
Northern (N. H.).....A. C. Warren, " " " Concord, N, H.
N. Haven, N. London & Stonington....Wm. T. Bartlett. " " " New Haven, Conn.
North Pennsylvania.....Ellis Clark, " " " Philadelphia, Pa
Nnrthern New York.....Marshall Conant, " " " Malone, N. Y.
Ohio & Mississippi.....Chas. E. Follett, " " " Cincinnati, Ohie.
Philadelphia & Reading.....John Welch, General Ticket Agent, Philadelphia, Pa.
Pennsylvania Railroad.....H W. Gwinner, " " " " "
Pittsburg, Columbus & Cincinnati.....Ira A. Hutchinson, General Ticket Agent, Columbus, Ohin
Pittsburg, Fort Wayne & Chicagn.....H. R. Payson " " " Pittsburg, Pa.
Pacific Railway, of Missouri.....E. W. Wallace, General Ticket Agent, St. Louis, Mo.
Philadelphia, Wilmington & Balt.....Geo. A. Dadmun, " " " Philadelphia, Pa.
People's Line of Steamers (N. Y.).....John C. Hewitt, " " " New York.
Providence & Worcester.....Wm. M. Durfee, " " " Providence, R. I.
Portland, Saco & Portsmouth.....Eliphalet Nott, Treasurer, Portland. Me,
Quincy & Toledo.....W. D. Richardsnn. General Ticket Agent, Springfield. Ill.
Racine & Mississippi.....R. C. Tate, " " " Racinc, Wis.
Rutland & Washington.....John McKengh, " " " Rutland, Vt.
Rutland & Burlington.....Wm. A. Burnett " " " " "
Rome, Watertown & Ogdensburg.....H. T. Frary, " " " Watertown, N. Y.
Rensselaer & Saratoga.....O, N. Crandall, " " " Troy, N. Y.
Sandusky, Dayton & Cincinnati.....J. M. Webster, " " " Sandusky, Ohio.
Sandusky, Mansfield & Newark.....H. M. Bronson, " " " " "
Saratoga & Whitehall.....J. H. Sternbergh, " " " Sarotoga Springs, N
The United States Mail Line Co.....Thos. Sherlock, Treasurer, Cincinnati, Ohin.
Terre Haute, Alton & St. Louis.....Jas. B. Ralston, General Ticket Agent, St. Louis, Mn.
Terre Haute & Richmond.....Chas. Wond, Secretary, Terre Haute, Ind.
Troy & Boston.....C. W. Moseley, General Ticket Agent, Troy, N. Y.
Toledo & Wabash.....J. E. Carpenter, Cashier, Toledo, Ohin.
Vt. & Can.. Vt. Central, and Sullivan..H. H. Locklin, General Ticket Agent, St. Albans, Vt.
Western (Mass.) Railway.....M. Griggs, " " " Springfield, Mass
Worcester Nashua.....M. Witter, " " Worcester, Mass.

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '62. 1y. Letter Box, 1302. C. J. SCHULTZ, Pittsburgh, Pa.

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Sch Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27.1y

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive En-

419 y I

## KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN,

RAILROAD AND CAR

## FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

## BUSH & LOBDELL,

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or Without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

Manner, at the Shortest, and on the

Most Reasonable Terms.

Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

MACHINE SHOP

SUPPLIES,

—AND—

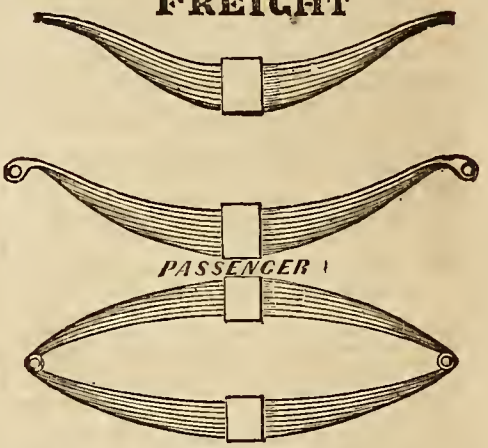
MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

RAILWAY SPRINGS.

FREIGHT




THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

ELLIPTIC AND SEMI-ELLIPTIC

**SPRINGS,**

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

PHILP S JUSTICE,

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

No. 47 West Front St., CINCINNATI, O.

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

## W. M. F. HEWSON,

STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stock. Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition.*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT.

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE. *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 09 P. M. | 2 35 A M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnihuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M. & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

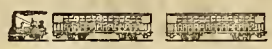
☞Trains of the Ohio & Mississippi Railroad run hy me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street

C. E FOLLETT,
Ge eral Ticke Agent.

W D. GRISWOLD, General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot ot Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can he obtaine at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnihuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2. MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn'a

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

THE SCHENECTADY

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅛ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

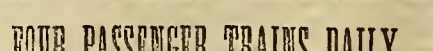
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M. (Express.

On Sundays, 10.24 P M.

☞Through connections made for all points East an Wes

WM. TEARNE SUTT.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, - - } Editors

CINCINNATI:
THURSDAY, MARCH 16, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| *Little Miami—* | *Depart.* | *Arrive.* |
|---|---|---|
| Cincinnati Express | 6.00 A. M. | 7.30 P. M. |
| Mail | 9.00 A. M. | 8.15 A. M |
| Columbus Accommodation | 4 00 P. M. | 11.30 A. M. |
| Morrow Accommodation | 6.20 P. M. | 8.00 A. M. |
| Night Express | 10.00 P. M. | 10.05 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky Mail | 7.00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7.00 A. M. | 9.45 P. M. |
| Cin. & Chicago Air Line Express | 7.00 A. M. | 9.45 P. M. |
| Dayton Accommodation | 2.20 P. M. | 5.45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5.00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7.00 P. M. | 12.35 P. M. |
| Hamilton Accommodation | 7.00 P. M | 8.05 A. M. |
| do do | 10.00 A. M. | 6.45 A. M. |
| *Marietta & Cincinnati—* | | |
| Mail Express | 7.40 A. M. | 7 00 P. M. |
| Chillicothe Accommodation | 3.30 P. M. | 11.30 A. M. |
| *Ohio & Mississippi—* | | |
| Louisville, St. Louis and Cairo Mail | 7.00 A. M. | 11.30 P M. |
| St. Louis and Cairo Express | 6.00 P. M. | 5.00 A. M. |
| Louisville, St. Louis and Cairo Express | 7 40 P. M. | 8.20 A. M. |
| *Indianapolis & Cincinnati—* | | |
| St. Louis and Chicago Express | 6.30 A. M. | 11 00 A. M. |
| Mail | 1.00 P. M. | 5.00 P. M. |
| Night Express | 4.00 P. M. | 1.30 A M |
| Lawrenceburg Accommodation | 4 25 P. M. | 8.35 A. M. |
| Harrison Accommodation | 9.00 A. M. | 3.00 P. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Morning Express | 9 00 A. M. | 7.30 P. M. |
| Accommodation | 4.00 P. M. | 8.05 A. M. |
| *Kentucky Central,—* (City time.) | | |
| First Train | 6.00 A. M. | 10.40 A. M. |
| Second Train | 2.00 P. M. | 6 00 P. M |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton. Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## GOLD---ITS RELATION TO PAPER CURRENCY---ITS EXPORT AND IMPORTS.

Mr. McCullough, the present Secretary of the Treasury, comes into office with correct views on one point of great importance. He is not humbugged, by the idea put forth in almost every newspaper of the country, that gold is a standard of value,—and that paper money is depreciated in proportion, as the quantity increases,—he repudiates almost decidedly. Since the war begun,—universal suspension of specie payments, and the creation of legal tender notes—gold has been *merchandize only.* The moment we recognize that fact,—we begin to have just ideas of the relations of gold to other things. Gold has been during the war nothing but merchandise marketable, like flour and protatoes,—and bringing a price, like other things, in proportion to the *relations of supply and demand.* In discussing this subject,—let us begin with Mr. McCullough's opinion, which here now becomes very interesting. In his report on the currency in last November,—he says;

"By referring to the gold market in New York during the three past years it will be perceived that its value has been regulated by other causes than the inflation of the currency.

"In January, 1862, gold in New York was at a premium of 1½ per cent. It soon fell to 1, from which it rose on the 10th of October to 37, and closed on the 31st of December at 24. On the 24th of February, 1863, it had advanced to 72½, but on the 26th of March, (favorable news having been received from the southwest) it went down to 40½, but in twelve days, on the receipt of less favorable intelligence from that quarter, it went up to 59½. A few days after, upon the report of the iron-clad attack upon Fort Sumter, it fell to 46, and on receipt of the intelligence of the surrender of Port Hudson to 23½. On the 15th of October it rose to 54, but reached no higher during that year."

"On the 1st of January, 1864, it opened at 52, went up to 88 on the 14th of April, and fell to 67 on the 19th of the same month. On the passage of the gold bill, June 22, it rose to 130, and fell the next day to 115. On the 1st of July it was forced up to 185, but on the day following (the gold bill having been repealed) it fell to 130. On the 11th of the same month it went up again to 184; on the 15th it fell to 144, and after various fluctuations dropped on the 26th of September to 87—thus rising between the 1st of January and the 1st of July, 1864, from 52 to 185, and falling between the 1st of July and the 26th of September from 185 to 87. None of these fluctuations were brought about by an increase or decrease of the currency; on the contrary, gold rose the most rapidly when there was no considerable increase of the currency, and fell in the face of large additions to it. Nothing can be more conclusive of the incorrectness of the opinion that gold is always the standard of value, and that the high price it has commanded in the United States during the progress of the war is the result of an inflated currency, than this brief statement of its variations in the New York stock market."

After noticing the efforts of disloyalists to keep up the price of gold, the gambling in it; and the evil influences of this conduct, he says:

"The effect of all this has been, not to break down the credit of the government, but to increase enormously the cost of the war and the expense of living; for however small may have been the connexion between the price of coin and other domestic products, every rise of gold, no matter by what means effected, has been used as a pretext by holders and speculators for an advance of prices, to the great injury of the government and the sorrow of a large portion of the people. It is unquestionably true that the abundance of money has facilitated the operations against the credit of the government, and that a more stringent market would have tended to check and restrain them, but it is a mistaken notion that the high price of coin is an evidence of an over issue of currency or of its depreciation. If it were generally believed that the war would be ended by the 1st of January, gold would fall before that time to 25 per cent. premium, if not lower, although the paper money in circulation might in the mean time be largely increased."

The country is to be congratulated on the fact, that it has a Secretary of the Treasury, who has sense enough to see, that paper money does not regulate the price or gold.

In addition to what Mr. McCullough says, we may add a few other facts. At the time, we are writing (10th of March) gold is 191, six months ago, it was 260 During this period—gold has been steadily, almost uniformly falling, just as the country becomes convinced that the war will end soon, it will fall. Yet, the paper money of the country has been increasing the whole time. The fact is, that if the war was actually ended,—so perfect is the confidence of the country, in the stability, and resources of the government,—that gold would not probably bear over 10 per cent. premium. But as there is a constant demand for gold to pay for the products of other countries, there must necessarily be some premium on gold. In regard to that,—the price of gold will depend on the relations of supply, and demand. Leaving the question of war, and peace out of view,—supply and demand always determines price. In regard to gold,—there are two kinds of demand continually going on, one is domestic,—the demand to pay Custom House duties; and the other is foreign to pay for imported goods. If things worked exactly even, these need not occasion any great demand for gold, but they do not work even. If, Exports just balanced Imports,—there would be no demand for gold to pay balances; but, they do not. Our Imports exceed the Exports in value largely. So also, if the Government paid out its gold for interest, the same day, it received it for customs, there would be no extra demand; but, it does not. Many millions are held up in vaults, and thus, there is a daily demand for gold. Hence too, the price of gold goes up very sensibly, when there is a large increase of Imports.

To illustrate the questions in regard to gold,—we will here give the Statistics of the Exports and Imports of gold; and the comparison of these with the domestic production.

In the four years since the commencement of the War,—the following represents the balances of Exports and Imports.

| | Excess of Imports. | Excess of Exports. |
|---|---|---|
| In 1861 | $16,548,431 | ..... |
| In 1862 | ..... | $20,472,688 |
| In 1863 | ..... | 72,780,377 |
| In 1864 | ..... | 91,976,044 |
| Four years | $16,548,431 | $185,674,109 |
| Excess of Exports | | $164,674,678 |

We have lost, in four years of War nearly *one hundred and seventy millions* in gold, to pay our debt for the purchase of foreign merchandise. But, even this is not as great, as we lost in the four years of peace, preceeding the War; viz: $204,000,000. The next question is, have we received as much domestic gold, from the mines, as we have sent to Europe? The production of Gold as shown,

by Exports of San Francisco for four years prior to the War ..... $188,091,100
Do do four years of War. $180,564,062

It seem, then, that in the four years prior to the War, we *exported sixteen millions more than we* produced; but, then in the four years of the War, we have *produced twelve millions more than we exported*, on the whole we have just about, as much gold, as we had eight years ago. Had, the same amount of Importations gone on since the War, as they did before,—we should have lost nearly all our gold. In the course of time, the laws of trade bring these balances nearly right; but, in the meantime immense mischief may occur to individuals. With the present high tariff, and a continuance of Military success,—gold will probably fall to within 20, perhaps 10 per cent. of par. With the present tariff, the balance of trade must soon be in our favor, in that case, gold will come very near par, and prices of all commodities rapidly fall; a result much more to be wished for,—by, the body of the people, who are consumers, than by Merchants, and Bankers.

## WHAT, AFTER PEACE?

In times of great public uncertainty, the merchant has no other course than to act according to what may appear to be the greater probability. In the present aspect of affairs, the probabilities are generally construed to favor an early return of peace, upon the basis of a restored Union. For our present purpose, we do not care to inquire how far this interpretation of the military situation is sound. Let it suffice, that a majority of the mercantile community agree in this view, and are consequently asking, with much eagerness, what will be the course of commercial affairs immediately subsequent to peace? There is the widest possible diversity of opinion on this question; some maintaining that we shall have an immediate revival of trading activity, and a wide expansion of our commerce; while others depict an immediate panic and a long period of subsequent depression among all the industries and throughout the entire country. The truth may probably be found between these extremes.

The first work to be done after peace will be the rectifying of the bad legislation of the last three years, relative to trade and finance. For the present, the people endure the inconveniences of a fluctuating currency, because they think it expedient to defer protest until Congress is less absorbed with questions deemed essential to the prosecution of the war. But the moment that the war pressure is removed, we shall witness a universal impatience for the resumption of specie payments, as essential to a free and healthy condition of trade. Judging from the present confusion of views upon the method by which that end is to be attained, there is reason to apprehend that the result will not come except as the issue of a series of futile experiments, exceedingly embarrassing to commerce and retarding the general process of recuperation. The view is now taking very general hold of the mind that we can have substantially a return to specie payments, through retiring a portion of the currency. Commissioner Lewis has given expression and shape to this opinion in his recent letter; and a large portion of the public press, who have been long desiring to see steps taken for a return to the specie basis, without being prepared to say how it should be done, have followed in the wake of Mr. Lewis.

So strong is this sentiment becoming, that it appears quite probable that next Congress we shall witness an attempt to restore the value of the currency to par, by reducing its volume. Possibly one or two years may be spent in making that experiment, the country, in the meantime, being kept in suspense by fluctuations in gold, and by the constant expectation of an appreciation of the currency to par. The result cannot be other than total disappointment: for really the value of the currency depends, not upon its volume, but *upon the prospect of its redemption;* and so long as there is no unrestricted offer, on the part of the Treasury, to redeem it on demand, the value of the currency will remain, as at present, regulated entirely by the same considerations as determine the value of other government securities. Moreover, a most serious commercial disaster would inevitably attend this experiment. For were the volume of the currency largely reduced, unaccompanied by a proportionate improvement in its value, trade would be crippled by an inadequacy of currency to meet the requirements of exchanges. In respect of nominal dollars, the *amount* of circulation might largely exceed that of ordinary times; while at the same time the *aggregate value* would fall much below the wants of trade. The scarcity of money, instead of increasing the value of greenbacks, as is popularly supposed, would only increase the rates of interest; and the enhancement of the rates of interest would check the movements of capital, reduce the prices of commodities below the normal level, and produce the most serious distress among commercial interests. Probably, after such a failure in the attempt to resume specie payments by appreciating greenbacks to the gold standard, we should have some other tinkering experiments with the currency; until at last, we should be probably brought to recognize a truth that should have been understood long ago, that there is no way of returning to specie payments, except by a repeal of the legal tender act.

During this period of costly pupilage, various recuperative processes will be naturally going forward; all of which however could not fail to be retarded by the prevailing monetary uncertainty and derangement.

The relations of the several markets will be suddenly changed by peace. The immense demand for army supplies, amounting probably to about $800,000,000 per annum, will be almost totally cut off, so soon as the laying down of rebel arms enables the government to disperse our army. That will immediately suspend the entire machinery of manufacture and trade now employed in clothing, feeding and equipping the army; and the capital so employed will remain stagnant until it can find profitable employment in new channels. It will amount to a more severe contraction of business than has ever resulted from any of our panics, to experience an immediate cessation of production in the mills that are making army woolens, in the workshops that are making those goods into clothing, in the factories that are making arms, and the forges that are producting cannon and shot, and in the various other industries that are contributing each in a minor degree but together to an enormous aggregate amount, to furnish the present war supplies. Of course, these industries will all ultimately find full employment in ministering to the wants of peace. But the change can only take place when the demand for common commodities has been increased in a degree equal to the extent of our present war expenditures; and that can only come to pass when the labor market has been brought to its normal condition, and more of natural produce,—the chief origin of our wealth,—has been brought into the market; —a process which must necessarily require considerable time for its development. It is possible, perhaps probable, that this process of transition may receive considerable acceleration from the cotton crop. If it should be found that the war closes with 2,000,000 bales of good, marketable cotton in the South, we should then have, within a few months, about $350,000,000 worth of Southern produce offered in our markets, in exchange for Northern manufactures and Western produce. This would at once give employment to much of the capital thrown out of employment by the stoppage of the war demand. Large amounts of Northern capital would find employment in rebuilding the ruined railroads of the South; in restoring the machinery that has been worn out in that section during the war; in building river steamers to replace those that have been destroyed by hostilities; and in establishing business agencies for the exchange of Northern products for Southern. These circumstances, arising naturally, and almost immediately, from the cessation of hostilities, will to a large extent compensate for the specific war demand, and will go far towards checking that ruinous reaction that usually sets in after the termination of a costly war.

Another important consequence of peace will appear in a rearrangement of the labor market. The closing of hostilities will send not less than four hundred thousand able bodied men, chiefly of the operative class, from the field to their homes in the North and the South. After a brief rest, these men will gradually fall into the respective divisions of labor in which they were formerly employed. This will at once supply the labor market, with all the operatives required to meet the existing demand for products; and may temporarily—that is for the interim before industrial recuperation is fully established,—produce a glut of laborers, resulting in reduced wages and more or less distress among the working classes. This unfortunate circumstance, however, could be of only brief continuance; for, on the one hand, the opening of trading intercourse with the South, would be attended with an enlarged demand for the several product of Northern labor, while, on the other hand, the very fact of low wages,—by cheapening the cost of products,—would tend to beget an increased trade, which would speedily give

employment to all the labor in the country. The addition of this large number of laborers to the productive resources of the nation would add immensely to our commerce. It appears from the census returns that, in times of peace, the product in our manufactures was at the average rates of $1,070 for each of the hands employed; and that, on an average, each agricultural operative produced $400 worth of produce. Supposing that one half of the returned soldiers should go back to agricultural pursuits, and that the other half be distributed among the manufactures, and their dependent trades, we should have the following addition to the annual product of the country:—

| | |
|---|---|
| 200,000 agricultural hands producing each $400 | 80,000,000 |
| 200,000 hands in other industries producing each $1,070 | 214,000,000 |
| Total | $294,000,000 |

We should thus have, as the immediate result of peace, an addition to our productive resources equal to about $300,000,000 per annum. Supposing the products thus represented to change hands four times before reaching the consumer, and acquiring increased value at each exchange, we should therefore have an addition to the annual trade of the country equal to about $1,500,000,000. These figures, however, are based upon par estimates; and, in present currency values, would represent $3,000,000,000 of trade. This is perhaps what might be reasonably expected as the result of returning the Northern and Southern armies to the pursuits of peace, when the laboring portion of them had again found their positions in the ranks of labor. There would seem to be no important reason for doubting that there will be found sufficient capital in the country for employing this large accession of laboring population. It is true that an immense aggregate of capital has been destroyed during hostilities; but it is also true, that an important proportion of those to whom it gave employment have been either slain or physically disabled; and it may perhaps be assumed, as a near approximation to the facts of the case, that, after peace, the remaining capital will bear towards the remaining labor almost the same proportion that existed between capital and labor before the war. If there should prove to be any deficiency of capital, as compared with labor, the fact of higher profits being realised here than in other countries would soon attract hitherward capital from abroad; so that a surplus of labor would be of temporary duration. The fiscal burthens of the country, by swallowing up a large proportion of the earnings of all classes, would necessarily curtail consumption; which would so far lessen the demand for labor and reduce our means for employing it. This is perhaps the most serious difficulty that the laboring classes have to fear. It is a positive and serious evil; and the best that can be said in mitigation of it is, that the fertility of our resources will enable the working classes to bear the burthens with less injury than would be suffered by the same classes of any other country, from equal imposts.

The altered condition of negro labor will be an important element in the labor market at the close of the war. It is to be presumed that the war will close with universal emancipation. While we have no doubt that such a result will ultimately yield a larger product of labor from the colored population of the South than was obtained from them in a condition of slavery, yet it may be gravely doubted whether such will be the immediate effect of emancipation. A very large proportion of the slaves have never been taught to respect labor for its rewards; and, so degraded are they, that they are not likely to be compelled to labor much in order to supply the necessaries of subsistance and comfort. After a lifetime of compulsory toil, which has naturally taught them to regard labor with disgust, the first impulse will be reactionary, seeking gratification in idleness. It will be only after a period of moral intellectual education, resulting from a freer intercourse with civilized society, and resulting let us hope also from special efforts for their instruction, that the emancipated slaves will yield the same amount of labor that they have done while in bondage; and that process of amelioration will require time for its accomplishment. For these reasons, it appears reasonable to expect that, immediately after the war, the inadequacy of negro labor will create a demand in the South for Northern operatives; which would relieve the Northern labor market of a surplus, should such exist; or would make laborers scarce here should there be no surplus.

The above are the considerations that will most really and permanently affect the condition of the country after peace; and to us they appear to afford reason for hoping that we shall come out of this war with much less permanent injury to our material interests than is usually suffered from a struggle of such gigantic dimentions. It is, however, to be feared that, if our monetary system is not brought to a more stable basis before the close of the war, the many and violent transitions in the several industries and trades consequent upon peace, will cause such extreme fluctuations in monetary affairs as will produce a most disastrous panic, retarding the process of adjustment and recuperation and inflicting great suffering upon all classes of the community.

---

A Look into the Future.—In the debate in the House of Representatives on the Niagara Ship Canal, Mr. Littlejohn concluded his speech as follows:

Now, sir, twenty-five or fifty years hence, from the Atlantic to the Pacific will be a continuous tier of States, members of the Union, and over those States will run the iron horse of the Pacific railroad. Members who reside upon the far western coast have also an interest, then, in this highway. The products of Asia wafted over the Pacific ocean, and then by rail, can be shipped upon the waters of Lake Michigan and pass to the Atlantic by this great improvement, and the merchandise of Philadelphia, of Baltimore, of New York, of Boston, and of Portland, will be sent westward over these waters, and will find a way to the coast of the Pacific, and even to China and India for sale and consumption. And not only that, sir, the time is coming, within the next half century, when this republic will dictate laws, not only in arts and sciences, but in pecuniary matters to the whole world. The moneyed center of the whole world is to be transferred from English to American soil, if we be but true to ourselves and use and develope the resources and advantages so bountifully bestowed upon us by nature. England must abandon her lines of communication with her Eastern possessions and become tributary to the lines that we propose to construct between the Atlantic and the Pacific. Her business men and emigrants seeking China and India must cross our continent and pay tribute to our enterprise and the genius of our institutions.

## LATE PRESIDENT OF ERIE R. R.

Nathaniel Marsh was born in Haverhill, Mass., where his ancestors resided for several generations. He was educated at Dartmouth College, Hanover, N. H., and studied law in his native State, soon after which he removed to New York, and became one of the assistant editors of the New York *Express*. When John Lorimer Graham was made the City Postmaster, Mr. Marsh became his first assistant, in which office he was distinguished for his industry and business habits. He was afterwards made Secretary of the New York and Erie Railroad, and in that position won the respect of the Directors and Stockholders for the attention and skill displayed by him in the arduous duties of his office. He served the road during the dark and troublous times of its greatest misfortunes, and lived to see the stock rise under his superintendence from three and four dollars a share to between one hundred and thirty and forty dollars. When the Erie Road was in its greatest trouble, he was selected by the Supreme Court, with the recommendation of the largest Stockholders, and with the general approval of the business community most interested in its success, to be the Receiver of the road. After two years of a very successful administration, during which the payment of interest was resumed upon the bonds, all the old debts paid, and the stock of the company placed in a condition where the payment of dividends was probable, Mr. Marsh was elected President of the road, and so long as he was able to be at his post, or to have cognizance of its affairs, the management was excellent both for the public and the owners of the road.

Mr. Marsh sacrificed his life, we are sorry to say, in his zeal and interest for the success of the great work in which he was engaged. He labored for the Erie road day and night, year in and year out, refusing all proper relaxation. In the performance of his incessant duties, which he discharged with such scrupulous exactness, he wore himself out. The machinery of life was so worn and so run, that at a little past middle life, or at about the age of fifty years, he became almost an old man, and died literally with the harness of labor upon his back and not enough of the oil of life left to keep its machinery longer in motion.

The loss of such a man is public as well as private. He was a most tried and faithful officer, as was proved by over twenty years of experience in the Erie office. Whatever work was done by him, was always well done. All of his fellow directors, all of his associates and employees, and all who knew him, will deeply deplore his loss. To his family the loss is an irreparable one, and as he leaves two children by his first wife, who are entire orphans, and four by his second wife. He died on the 19th of July, 1864.

The following resolutions of respect were unanimously passed July 26th, 1864, by the Directors of the New York and Erie Railway Company. Such sincere, heartfelt commendation is worth a life of honorable toil to obtain; and that they were fully deserved, there is not the slightest qualifying doubt:

Whereas, The Vice-President has officially communicated to the Board the intelligence of the death of our late President, Nathaniel Marsh, Esq., therefore

*Resolved*, That in testimony of our appreciation of the great value of his services to this Company, and of our estimation of the excellence of his character, the following memorial be placed upon the Records of the Board, and a copy thereof be transmitted to the family of the deceased:

On the organization of the New York and Erie Railway Company, under the act of 1845, Mr. Marsh, then a young man, first entered its employment as Secretary, and continued to hold this office until he was appointed Receiver. The success with which the construction and equipment of the road were steadily prosecuted, from 1845 to 1853, was partly due to his financial ability and the confidence reposed in him by the community In August, 1859, he was selected by the Supreme Court, to serve as the Receiver of the Corporation, pending the suits for the foreclosure of the mortgages. After a very successful administration as Receiver, during which he lent a hearty coöperation to the reorginization of the Company, he was unanimously elected the first President of the Erie Railway Company, and took charge of the line as such on the first day of January, 1862.

He continued faithfully to perform the duties as President though his health and strength were steadily failing, until he literally died at his work, as a candle goes out in the socket. During the five years of his administration, first as Receiver and then as President, though the common stock of the Company was largely increased by conversions, yet its market value advanced from four dollars a share to a steadily maintained premium; the unsecured funded debt was extinguished; the mortgage debt was reduced several millions of dollars; the traffic of the road was increased nearly three-fold; the rolling stock was largely increased and improved; sixty miles of new line were added to the western division of the road; a long lease was taken for one hundred and fifty miles of road between Corning, Rochester, and Buffalo; the Long Dock property was opened for use—thus giving our line independent termini at Buffalo, Rochester, and New York, and by the construction of a few miles of road, the great business of the Pennsylvania Coal Company was secured. These facts are eloquent testimonials of the success of his administration, but they fail to convey an impression of the traits of character by which it was achieved. Of these we can speak from a long association with him.

He was a prudent, sagacious man, of unquestioned probity, of uncommon energy, of faithful devotion to every interest placed in his charge, and of a judical sense of justice which made him ever ready to hear both sides of the question, and firm in maintaining himself when he had decided what to do. His indefatigable industry hesitated at no amount of details, his genial disposition and even temper turned casual business acquaintances into friends, his sound common sense instinctively probed the motives of those who approached him with designing purposes, and his rare tact gave him the power of being firm without making enemies. The Erie Railway Company was fortunate in having such a servant. His loss can not easily be supplied. We who have been associated with him for so many years in friendly business intercourse, may well say that to us individually it can never be made good. We should do injustice to his memory should we omit also to say that in every sphere of life in which he moved, the same traits of character that made him so valuable an officer to us, gave him a useful influence upon all with whom he came in contact. He was a good citizen, bountiful in his charities, a sympathizing neighbor, a faithful member of the Christian body with which he communed, and a kind affectionate husband, father and friend. Horatio N. Otis, *Sec'y.*

—*Appletons' R. R. Guide.*

## DOMESTIC COMMERCE OF U. S.

We take the following very interesting tables from the "Statistics of the Foreign and Domestic Commerce of the United States," made to Congress by the Secretary of the Treasury. We may add that since 1862, the last year embraced in the report, the domestic commerce has increased very rapidly, so that the contrast between 1856 and 1864 would be still more striking:

*Table showing the per cent. of receipts at the principal receiving points for six years from 1857 to 1862, inclusive of the foregoing eastward movement.*

| | 1857. | 1858. | 1859. | 1860. | 1861. | 1862 |
|---|---|---|---|---|---|---|
| Buffalo | 41.8 | 47.1 | 50.0 | 47 2 | 51.5 | 53 4 |
| Oswego | 18.3 | 19.2 | 71 1 | 21.7 | 15 5 | 13.3 |
| Montreal | 11.8 | 9.2 | 8.7 | 9.2 | 12.6 | 12.3 |
| W. Ter. B. & O R. R. | 5.3 | 6.5 | 5.7 | 2.4 | 3.0 | 2.9 |
| Ogdensburg | 6.9 | 6.0 | 5.8 | 3.5 | 3.4 | 3.4 |
| West Ter. Pa. C. R. R. | 4.3 | 4.3 | 4 2 | 3.9 | 4 1 | 4 4 |
| Dunkirk | 4.4 | 3 4 | 5.6 | 4 2 | 3.8 | 4.3 |
| Suspension Bridge | 2.3 | 2.0 | 0.7 | 6.5 | 5.4 | 5.3 |
| Cape Vincent | 1 9 | 1.8 | 1.3 | 0.8 | 0.6 | 0 7 |
| Rochester | ..... | 0.5 | 0.9 | 0.6 | 0.1 | 0.0 |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

The following is a comparison of total quantities of flour and grain moved eastward for seven years, to 1862:

*Table showing the variations in the movement eastward from 1856 to 1862.*

| | Flour. | Wheat. | Corn. | Other grain. |
|---|---|---|---|---|
| 1856 | 3,865,442 | 19,505,353 | 14,282,672 | 4,592,569 |
| 1857 | 3,397,954 | 16,763,285 | 8,779,832 | 2,256,914 |
| 1858 | 4,499,613 | 21,843,850 | 10,495,554 | 5,035,697 |
| 1859 | 2,760,274 | 16,865 708 | 4,423,096 | 5 264,051 |
| 1860 | 4,106,057 | 32,334,291 | 18,0 5,778 | 7,712,132 |
| 1861 | 6,533,869 | 46,384,144 | 29,524,628 | 10,656,116 |
| 1862 | 8,359,910 | 50,699,130 | 32,985,923 | 10,844,939 |

Reducing the flour to bushels of wheat, the following table will show the total eastward movement, in bushels, and the receipts at Buffalo for the years indicated:

| | Receipts at Buffalo | Total eastward movement | Buffalo per cent. of total movement |
|---|---|---|---|
| 1856 | 57,707,769 | 26,230,791 | 45.5 |
| 1857 | 44,789,851 | 20,052,689 | 44.8 |
| 1858 | 39,872 566 | 28,219,855 | 47.1 |
| 1859 | 44 354 225 | 22,215,425 | 50.0 |
| 1860 | 78,652,4-6 | 37,1 3,461 | 47 2 |
| 1861 | 119,264,233 | 61 480 601 | 51.5 |
| 1862 | 136,329,542 | 72,794,188 | 53.4 |

Patent Tank Bottom Railway Car.—The *Pittsburg Commercial* says that Mr. J. F. Keeler, of that city, the manufacturer of the patent mammoth scales, has just received letters patent for a tank bottom railway car, intended for the transportation of liquids. This car is made of sheet or boiler iron, of the same proportions as the ordinary house or box car. The tank is divided by longitudinal and lateral bulkheads into compartments of from five to ten barrels capacity, provided with suitable holes, pipes and stop-cocks for filling and emptying. It is calculated that by means of one of these tank cars one hundred barrels of oil may be safely carried Above the tank, solid freight can be carried, there being left above the top of the tank almost as much room for freight as there is in an ordinary box car. The advantages of such a car cannot fail to be appreciated. It is estimated that by the present mode of transporting oil in barrels from Oil Creek to the seaboard, the loss by leakage and evaporation is about ten per cent, while by the new mode it will not amount to more than a quarter of one per cent. The cost of transportation of barrels East and West and the insurance thereon, is also saved. It has been carefully estimated that at least two hundred dollars can be saved, and most likely a larger sum in the transportation of one hundred barrels of oil. To oil dealers the benefits arising from the employment of these tank cars in transporting oil will be manifest at a glance. Mr. Keeler intends getting up forthwith an experimental car for the purpose of testing its capacity and strength, which latter quality Mr. K. is convinced will be greater than that of the ordinary box freight car. There are some other advantages which the new car will possess, such as being one ton less weight than the usual freight car, and the lessened strain of the cars on the rail, which will commend themselves to those in quest of a capacious, well adapted car for the transportation of liquids.

## VERA CRUZ AND MEXICO R. R.

The Vera Cruz and Mexico Railroad business is worthy of special mention. As the principal, if not the only means of access to capital from the Atlantic seaboard, this route has long occupied the attention of foreigners, as well as of the local government. By it, or at least over a considerable distance of the country it now traverses, Cortez made his celebrated march nearly three centuries and a half ago; and over the entire road, as afterward completed by the Spaniards under the Vice-Royalty, and since maintained in tolerable order by the Mexican Government, General Scott led his army up the sierras to the second conquest of Mexico. For many leagues it winds up and down and among lofty ranges of mountains, but gradually ascending, until between Puebla and Mexico, it reaches a hight of nearly ten thousand feet above the level of the sea—said to be the highest point on the globe traversed by diligences. The mountainous character of the road, however, does not commence until a distance of about eighty miles from Vera Cruz has been passed, extending nearly across the State or department of that name. This space is almost a level plain, stretching for a vast distance north and south along the seacoast, and from it may be seen the snow-capped peaks in the interior—silent but eloquent monitors to the traveler of what he may expect to encounter before reaching the far off capital.

Some fifteen years ago, two commercial houses obtained from the Government the exclusive right to build a railroad from Vera Cruz to Mexico. The whole contract eventually fell into the hands of the celebrated and wealthy house of Escandon, a house reputed to be worth $15,000,000. Under their auspices it reached a distance of some thirty miles out from Vera Cruz, where, about the time of the French intervention, it was continued to or near the small settlement of Soledad. At that time the elder brother of the Escandons went to Europe, and disposed of the contract and road to a company in London, who were to complete the road to the capital. The requisite money was raised and deposited in the Bank of England to await the solution of an important question—which was, whether Maximilian would ratify all the conditions of the existing contract.

The agent sent for this purpose was the famous English railroad contractor, Mr. Willam Lloyd, builder of the principal Chilian, Brazilian, and several European roads. Lloyd arrived here about three months ago with a corps of engineers and employes for the immediate prosecution of the work—a work formid-

able in character, owing to the obstacles to be surmounted in that part of the route yet to be attempted. But grants, as made under the old system of "grab all you can while in power," which ruled the former successive presidencies of the republic, and the more gravely considered ones of the present government, are very different affairs. Among the articles in the former concession was one giving the exclusive right of way to the grantee forever, and another giving him the right to fix the rates of fare. To these vital points, yielded with the recklessness of former short-lived administrators, the Imperial government refused its consent, believing it to be bad policy to make to any foreign company so important a concession in perpetuity, involving, as it might, future disputes as to lands, etc., and perhaps ending in serious international wrangles; while the right to regulate the tariff of rates of fare and freight would enable the company in time to even dictate terms to the government by raising their prices to such enormous rates, under English and other secret diplomacy, as to paralyze trade, discourage immigration, and, in short, by monopolizing the only traveled route from the coast to the national capital, exercise a power within the realm always injurious to the general interest and often dangerous to the public peace. With genuine John Bull tenacity, Lloyd and his advisers have refused to budge an inch, although the government has offered to set the term of the contract at ninety-nine years, and to fix such rates of freight and passage as could not fail to be just and equitable for both parties.

This railroad question has at length become all-absorbing; the press pegs away at it every morning, and Lloyd is temporarily the lion. Within a few days he has sent in, with truly British phlegm, his ultimation to the government, stating that if within a given time the terms of the company are not acquiesced in, he and his engineer corps will return to England and renounce the whole business, costly as it has been to the capitalists thus far. This implied threat, however, will rather retard than facilitate matters. The bluster which John Bull always uses with such effect with the little nations of the earth, is quite thrown away here. There are probably no people where the old adage about "sugar catching more flies than vinegar," applies more completely than among Mexicans. *Suavitur in modo* is invariably the best course with them.

Just at this point, the question comes up whether some of your Wall-street capitalists might not step in and seize the bird while their friends from over the water have been beating the bush? There is no doubt but that Maximilian would rather have this great enterprise achieved by Americans than by English. If the truth were known, it would be found that the Emperor, much as he wishes to see the road completed, is not desirous of linking himself too intimately with the English, who are forever making demands and trumping up "damages" and other means of annoying governments—especially those of Spanish-America. In fact, only a few days since, Lloyd, as the agent of Messrs. Smith, Knight & Co, "the company" in London who have purchased the Escardon constract, published a card in one of the French papers here, hinting at the enormous reclamations which his principals would hold against the Mexican government if the railroad affair should be any longer delayed. This sort of thing is by no means palatable to the government, especially at a time when the Emperor is straining every nerve to advance the interests of Mexico, and is giving his entire time to the patient consideration of plans for the investment of foreign capital.

The Vera Cruz and Mexican Railroad will be, when completed, exceedingly profitable. It will command virtually the trade of the empire. All the cargoes passing from Vera Cruz into the interior to supply several millions of consumers—all the troops, passengers, and the incalculable amount of goods used in military and civil life—every thing, in short, to meet the demands of a great nation, into which an ever-increasing tide of immigration is pouring, must pass over this grand highway, destined ere long to connect with some port on the Pacific, thus completing interoceanic communication. Such a future might well tempt the cupidity of capitalists without haggling with a generous government for terms which surely no monarch in the world, unless he had lost his senses, would think of conceding. The probable cost of the road, from its present inland terminus on to Mexico, has been studiously concealed; but one or two newspapers here have so enormously exaggerated it, that even Mexicans, who neither know nor claim to know any thing about such things, laugh at the absurdity of the figures as given by the English engineers. The enterprise is a very heavy one, and must cost a large sum. The cuttings in many places will be expensive, and the usual difficulties found in mountainous passes will be presented; but these will not be much greater than have been repeatedly overcome in the United States, where the prospects of a profitable return were by no means so flattering. In case that Messrs. Smith, Knight & Co., should not succeed in effecting any thing with this government, the requisite millions surely ought to be forthcoming from Wall street. A tithe of the capital annually thrown away in wild-cat mining speculations and theoretical petroleum projects would more than build it.—*Correspondant of New-York Herald.*

## RAILROAD DECISION.

Arrangement and Connection between Railroad Companies—Excursion Trains.—Coupon Tickets—Refusal to give Check for Luggage.—Liability of Companies for Loans of Luggage in such case.

The case of Najac against the Boston and Lowell Railroad Company, recently decided on appeal in the Supreme Judical Court of Massachusetts, was an action brought by the plaintiff against the defendants in the Supreme Court in that State, on contract to recover for the loss of a trunk and its contents.

The following facts were agreed upon between the parties:

In September, 1859, one Josiah Perham, suggested to the defendants' agent an arrangement for an excursion train from Boston to Montreal, in the Province of Canada, and back. Such arrangement was accordingly made with all the connecting railroad companies on the line, by which the price of each ticket was fixed at five dollars, of which Perham was to have fifty cents, and the residue was to be divided among the various railroad companies in proportion to the length of their respective routes, and the train was to start from the defendants' station in Boston on the 20th September in said year. The tickets were accordingly printed, having a printed head "From Boston to Montreal," and bearing the name of the defendants' agent, with the designation of his office, and with coupons attached for the other roads, good for ten days, and covering the return trip. Perham took some of these tickets and disposed of them as he pleased, and gave a receipt for such as be received, and returned all that he did not sell.

The plaintiff, a citizen of Providence purchased two tickets of Perham, one for himself and another for his wife, intending to go to Montreal, and on his return to visit friends in Vermont, New Hampshire and Maine, and to be absent from home several weeks.

On the 20th of September, he delivered two trunks to the defendants' baggage master at their station in Boston, and requested checks for them for Montreal. The baggage master declined to give checks, saying that they did not provide checks on excursion trains. The plaintiff then asked to have them checked by the regular train. To this the baggage master replied that the plaintiff and the trunks must go by the same train and they would be perfectly safe, as he (the baggage master,) was to go through with them. The trunks were put into the baggage car of the defendants, and the plaintiff and his wife took their seats in a passenger car of said defendants. The defendants' baggage master and both cars went through to Montreal, but the defendants' locomotive went only to the termination of their own road. Each road furnished its own locomotive and conductor. One of the plaintiff's trunks was lost after the termination of the defendants' road, but on what part of the route was left uncertain; and the plaintiff demanded it of the defendants' baggage master at Montreal on the 21st of September.

It was agreed that if upon this state of facts the action could be maintained, judgment should be rendered for the plaintiff; and judgment was accordingly rendered in favor of the plaintiff in the Court below, and the defendants appealed.

Dewey, J.—In the view we have taken of the present case, it is unnecessary to enter upon the consideration of the question as to the effect of an ordinary sale of a ticket, having coupons for the connecting roads, the place of destination being beyond the limits of the road of the company selling such ticket, in reference to the liability of such company for the loss of baggage of the ticket holder, occurred beyond the limits of their own road. The facts here present their own peculiar circumstances, upon which this case may be decided. The defendants had, in common with various connecting roads, arranged for an excursion train from Boston to Montreal, starting from the depot of the defendants in Boston. The plaintiff purchased two tickets duly issued by the defendants, having printed thereon "From Boston to Montreal," and having attached to them coupons for the other roads, which also had upon them the words "From Boston to Montreal." Having these tickets for himself and his wife, the plaintiff became entitled also to the carriage of his reasonable baggage, and he delivered to the defendants' baggage master, at their depots, two trunks, and requested checks for them to Montreal. The baggage master did not furnish checks, or offer to do so, either for the limited route of the defendants' road or through to Montreal. In this the defendants were acting in violation of law, such checks being required by the provisions of S. P. 1854, C. 23, by which it was made "the duty of all railroad corporations in this commonwealth to give checks when requested to do so, to passengers, for the baggage of such passengers, when delivered for transportation."

Upon the plaintiff's renewing his demand for checks for his baggage, and asking to have his baggage sent forward by the regular train,

if checks could not be given on an excursion train, the baggage master refused to send the trunks by the regular train, saying the trunks and the plaintiff must go by the same train, and they would be perfectly safe as he (the baggage master) was to go through with them. The defendants' baggage car and baggage master went through to Montreal. At Montreal the baggage master delivered one of the trunks to the plaintiff. The other was demanded, but not delivered.

Upon the facts stated, the defendants, in violation of law, refused to give checks, although requested so to do. As a substitute, they, through their agent, declared to the plaintiff that the trunks would be perfectly safe, as their baggage master was to go through to Montreal on the train. The trunks were thereupon committed to the custody of the defendants' baggage master, and the company assumed the obligation arising from these representations and acts.

From the nature of the baggage, the plaintiff did not exercise any further personal oversight of it on the route, nor make any examination at the terminus of each road, to ascertain whether the trunks were or were not in the baggage car. Under these circumstances the plaintiff has the right to recur the defendants as the party immediately responsible for the loss of his trunk. Whether the action might not have been a joint one against all the railroad corporations which united in this common enterprise, it is unnecessary to decide. We have no doubt of the legal capacity of this corporation to assume responsibilities for the safe transportation of baggage beyond the limits of their own road. Angell and Ames on Corp., §§ 229, 239, 256. Redfield on Railways, 281, 287. Simkins *vs.* Norwich and New London Steamboat Company, 11 Cush, 102. Fitchburg and Worcester Railroad *vs.* Hanna, 6 Gray, 539. What is necessary to constitute such contract, or what acts will create such liability, must be decided as the cases occur.

As the default occurred on the 21st of September, and the trunk was then demanded, interest may properly be allowed from that date.

Judgment will be entered for the plaintiff for the sum stated in the report of the auditor, with interest as above stated.

## LITTLE MIAMI & COL. & XENIA R. R.

Below is a detailed statement of the financial operations of the "Little Miami & Columbus & Xenia" Railroad Company for the year 1864. The aggregate earnings for these successive years were as follows:

| | |
|---|---|
| In 1862 | $1,632,487 50 |
| " 1863 | 1,972,153 38 |
| " 1864 | 2,433,286 61 |
| Inc. per cent. from 1863 to 1863 | 20 per cent |
| " " " " | 23 " |

Large as have been the increased earnings of many of the northern railroads, this is, we believe, a larger increase than on any of them. It is complete proof both of the prosperity of the road and of its admirable management. It is now twenty years since the regular commencement of business on this road. In all that time, with the exception of perhaps some two years, its business, power and profits have continually increased, till now, the aggregate business is *tenfold*. The stock of the road is under $5,000,000, and consequently the above net earnings are 19 per cent on its stock.

EARNINGS AND EXPENSES FOR THE YEAR ENDING NOVEMBER 30, 1864.

| | | |
|---|---|---|
| Passenger earnings | | $1,337,982 10 |
| Freight earnings | | 1,031,965 09 |
| Express and mail earnings | | 121,027 97 |
| Rent of Track and depot | | 63,333 46 |
| | | $2,554,312 62 |
| Less amount paid to other companies under contracts for division of earnings, viz: | | |
| To Cincinnati, Hamilton & Dayton Railroad Company | $107,695 95 | |
| Cleveland, Columbus & Cincinnati Railroad Company | 6,596 07 | |
| Columbus & Indianapolis Central Railroad Companies | 9,466 57 | |
| | 123,758 59 | |
| Total earnings after division | | $2,430,554 03 |
| Add amount received from Cincinnati, Hamilton & Dayton Railroad Company as our proportion of their mileage earnings for the year ending March 31, 1864 | | 2,732 58 |
| | | $2,433,286 61 |
| Transportation expense | $595,551 92 | |
| Car expense | 145,676 23 | |
| Locomotive expense | 124,334 09 | |
| Road expense | 334,646 39 | |
| General expense | 65,410 78 | |
| Loss and damage | 43,420 39 | |
| Total working expenses | | $1,309,039 80 |
| Interest | 96,047 11 | |
| Taxes | 89,083 55 | |
| Dayton and Xenia lease | 10,153 87 | |
| Springfield, Mt. Vernon & Pittsburg interest | 7,000 00 | |
| | $1,511,324 33 | |
| Net earnings for the year | | $921,962 28 |

EXTENT OF TRAVEL WEST.—The Post commander at Fort Laramie states that of the number of teams which passed Forts Laramie and Hall, last season, 63,000 passed the former, and 27,000 the latter, *en route* for Idaho, Montana and Nevada, making in all, estimating three persons to a team, which is a very low estimate, as nearly 4,000 Mormous are embraced in the number, 270,000 souls! With these figures staring one in the face, who can doubt the facts of an empire rising in the Far West—on the Pacific slope and in the Rocky Mountains.

SOUTHERN MINNESOTA RAILROAD.—The bill recently before the Legislature of Minnesota, granting swamp lands to aid in constructing the western branch of the Southern Minnesota or Root River Railroad, which will soon become a law, provides for four sections per mile, to be taken from sections designated by odd numbers lying in the Winnebago land district and also from lands lying south of the Winnebago river, west of range 29. The design is to construct the road from La Crescent, by way of Preston, west through the southern tier of counties, thus abandoning the old plan of running through Chatfield to connect with the Winona and St. Peter Railroad at Rochester.

## STATISTICS.

EMIGRANTS ARRIVED AT NEW-YORK FROM MAY 5, 1847, TO DECEMBER 31, 1864.

| | |
|---|---|
| Ireland | 1,346,081 |
| Germany | 1,126,992 |
| England | 371,699 |
| Scotland | 77,949 |
| France | 63,085 |
| Switzerland | 49,123 |
| Holland | 21,444 |
| Wales | 20,837 |
| Norway | 14,234 |
| Sweden | 15,478 |
| Italy | 9,630 |
| Belgium | 5,771 |
| Spain | 5,249 |
| West-Indies | 5,215 |
| Denmark | 7,792 |
| Poland | 2,834 |
| Sardinia | 2,305 |
| South-America | 1,740 |
| Portugal | 1,240 |
| Nova-Scotia | 999 |
| Russia | 677 |
| Canada | 542 |
| Mexico | 512 |
| Sicily | 290 |
| China | 271 |
| East-Indies | 140 |
| Unknown | 95 |
| Greece | 77 |
| Turkey | 69 |
| Arabia | 8 |
| Africa | 6 |
| Total | 3,152,794 |

The above table only states the number of emigrants landed at New-York. To have the aggregate number for all the United States, we must add about one-fourth to the above figure, say 800,000, giving the total number of Europeans arrived in the United States, from 1847, as follows:

| | |
|---|---|
| Total at New-York | 3,152,794 |
| Other Ports, etc | 800,000 |
| Total | 3,952,794 |

From the above whole number stated, Ireland furnished 1,346,081; England, 371,699; Scotland, 77,949; Wales, 20,837. France contributed, 63,085; Switzerland, 49,123; Belgium, 5,771.

TABLE SHOWING THE ESTIMATED WEALTH OF THE MERCHANTS, MANUFACTURERS, AND TRADERS IN THE NORTHERN STATES.

| States and Principal Cities. | Business Houses. | | Wealth. |
|---|---|---|---|
| Connecticut | 3,632 | | $145,955,000 |
| Delaware | 1,150 | | 24,701,000 |
| District of Columbia | 1,382 | | 17,448,000 |
| Illinois | 15,215 | | 207,508,000 |
| Indiana | 8,512 | | 134,240,000 |
| Iowa | 5,032 | | 38 532,000 |
| Kansas | 438 | | 3,357,000 |
| Kentucky | 1,525 | | 33,959,000 |
| Louisiana—New Orleans only | 852 | | 50,784,000 |
| Maine | 4,962 | | 99,298,000 |
| Maryland | 1,425 | $23 0-9,000 | 3,665 |
| Baltimore | 2,240 | 89,270,000 | 102,259,000 |
| Mass | 12,755 | 353.95 ,000 | 17,302 |
| Boston | 4,517 | 511,8.5 000 | 808,815,000 |
| Michigan | | | 5,934 |
| Missouri | | | 83,943,000 |
| Minnesota | | | 3,263 |
| New Hampshire | | | 83,334,000 |
| New-Jersey | | | 959 |
| New York | 26,326 | $442,194,000 | 7,602,000 |
| " City | 10,646 | 1,235,010,000 | 5,910 |
| Ohio | | | 36,932 |
| Penn | 15,485 | $379,437,000 | 1,677,201 000 |
| Phila | 7,456 | 353,859,000 | 17,005 |
| Rhode Island | | | 310,725,000 |
| Vermont | | | 22,911 |
| Wisconsin | | | 733,296,000 |
| | | | 2,487 |
| | | | 114,704,000 |
| | | | 2,494 |
| | | | 19,959 000 |
| | | | 5,360 |
| | | | 53,775,000 |
| | | | 168,925 |
| | | | $4,944,766,000 |

## MINERAL WEALTH OF LAKE SUPERIOR.

The whole basin of Lake Superior indicates the presence of iron and copper. The mountains which divide the waters of Lake Michigan to the southeast of the Mississippi river and its tributaries to the southwest and west, of the Rainy Lake river to the northwest, and of Hudson's bay to the north and northeast—the outer rim of the Superior basin—are found, wherever explored, to contain iron ore The mines at Marquette, Michigan, have been successfully worked, in consequence of the construction of a railroad from the harbor of Marquette to the Iron mountain eighteen miles distant; but iron deposits in the same mineral range are situated at no greater distance south of Bayfield and Superior, in Wisconsin, and thence have been traced around the north shore of the lake, in Minnesota and in Canada.

Nearer the lake coast, and apparently a lower formation, are the copper districts. The only locality on the southern shore which has attracted attention is a district extending from Keweenaw Point to the Montreal river 100 miles in length by four to twenty miles in width. On the north shore of the lake, in Minnesota, near the western extremity of the lake, and in Canada for a distance of 200 miles northwest from the Sault St. Marie, are well-defined copper regions which are now attracting the attention of capitalists, and will probably prove as productive as the Keweenaw, Portage Lake, Ontonagon, and Carp Lake districts, as the subdivisions of the Michigan copper-bearing territory are termed.

During the year 1863 discoveries were made in the vicinity of Marquette, which suggest that Michigan is destined to become, at an early day, a great silver-yielding State. [In the same vicinity, the Huron mountains are reported to be gold-bearing, and at the latest date (June 13, 1864) there is a probability that the discoveries and production of gold in this district of the Lake Superior basin will fully equal the facts in regard to silver.] The newly discovered district is known as the granite range, lying between the schistose or iron range and Lake Superior, and is from ten to twenty miles in breadth and about fifty miles in length. Lodes of argentiferous galena have been found in this region, yielding from ten to thirty pounds of silver to the ton of metal. Assays made on some of the ores have discovered gold in them to the value of $60 to $240. If these statements are confirmed, the silver dirtrict of Lake Superior will exceed in value either of the ranges now yielding copper and iron.

Under the impulse of the present demand for iron and copper, the Minnesota district, extending from Fond du-Lac to the Grand Portage at the mouth of Pigeon river, has been thoroughly explored with satisfactory results; while Canada has taken effective measures for the encouragement of mining enterprises on the remainder of the northern shore. Title to mineral lands on Lake Superior can now be acquired from Canada at one dollar per acre, subject to a tax of one dollar per ton of ore. This order will have the effect to transfer English capital to the Nepigon, Pic and Michipicoton districts of Lake Superior, as it is now admitted that the copper mines of Great Britain have lately failed of their former productiveness. A correspondent of the London Mining Journal states that "the very rich mines of Cornwall and Devon are limited in the present day, and that some thirty or forty of the greatest and richest mines in those countries are exhausted, at least for copper." There were, in March, 1864, more than fifty bills before the Canadian Parliament to incorporate companies for mining gold, silver, lead, antimony, iron, and copper

Similar and greater activity prevails in all the American districts of Lake Superior. The total amount of capital invested in the fee-simple and development of the copper mines now worked in Michigan, not including the value of the metal produced, is estimated at $6,000,000, while their stocks are worth over, $15,000,000. The aggregate amount of copper produced in 1863 was not less than 9,000 tons of stamp work, barrel and mass, or about 7,500 tons of ingot, worth at its present value over $6,000,000; but as the largest portion was probably sold at an average of 35 cents per pound, the aggregate receipts of sales will not be much over $5,000,000. The products of the Marquette iron mines for 1863 are reported as 185,000 gross tons of ore, and 13,732 gross tons of pig iron. In 1855 the product of the same mines was only 1,447 tons of iron ore, with no production of pig iron; in 1858, 31,035 tons of iron ore and 1,627 tons of pig iron.

The exports, of all values, for 1863, from Lake Superior, will amount to $10,000,000, imports $12,000,000, consisting, in addition to provisions and merchandise for the mining villages, of shipments of machinery and other materials for permanent improvements.—[*Rep. on For. and Dom. Com.*

## COMMERCE OF CLEVELAND.

The Cleveland commercial annual statement for 1864 presents the following aggregates:

| | |
|---|---|
| Total imports, foreign | $987,327 |
| Total imports, coastwise | 109,917,240 |
| Total imports | $107,924,567 |
| Total exports, foreign | 580,362 |
| Total exports, coastwise | 104,431,301 |
| Total exports | $105,011,669 |
| Number of vessels cleared to foreign countries | 311 |
| Number of vessels cleared coastwise | 2,739 |
| Number of vessels entered from foreign countries | 384 |
| Number of vessels entered coastwise | 2,604 |

Of the leading articles of export are the following in value—coastwise:

| | |
|---|---|
| Coal | $1,975,810 |
| Flour | 3,377,187 |
| Merchandise | 79,031,200 |
| Highwines | 1,125,390 |
| Nails | 1,103,920 |
| Tobacco | 4,801,275 |
| Wool | 2,970,450 |
| Whisky | 1,612,880 |
| Iron | 1,002,130 |

COASTWISE IMPORTS OF LEADING ARTICLES.

| | |
|---|---|
| Merchandise | 98,719,800 |
| Sugar | 2,136,200 |
| Iron | 1,305,011 |
| Wheat | 602,585 |

The value of exports in British vessels to foreign countries was $463,978; in American vessels, $116,384. The value of imports from foreign countries in American vessels was $476,392; in British vessels $510,935.

## PHILADELPHIA AND READING R.R.

REPORT OF GENERAL SUPERINTENDENT.

The increased expenses, over those of 1863, amount to $965,562.35, and are thus accounted for:

"Lateral railroads in coal region" have cost $434,893.93 more than during the previous year; caused by seven months' working of the Mine Hill Railroad; four months of the Little Schuylkill Railroad; eight months of the East Mahanoy Railroad, and twelve months' working of the Lorberry Creek Railroad, more than in 1863

A considerable increase in the passenger and merchandise business, requiring more trains for this service, and a continued rise in value beyond even the high prices of last year, of mechanical and other labor, coal, iron, oil, and materials of all kinds. The item of fuel alone, including coal and wood for locomotives and shops, costs $224,992.23 more than in 1863.

The apparent decrease in the average number of tons of coal hauled per train (Statement H.) is owing to their loads having been reduced to through tons, each hauled ninety-five miles, in place of the through and way tons added together, irrespective of distance, as in previous years.

Had the latter mode of compntation heen continued, the average number of tons per train would have been 511.1 tons of coal, a decrease of less than three-quarters of one per cent. compared with last year's trains. The same explanation is also given for the average tonnage of freight-trains, (Statement L.) said trains averaging 196.4 tons per train, including way-tonnage as in former years, an increase of more than five per cent over 1863.

Since November 23d, 1863, through passenger trains between New-York and Washington, without change of passengers, baggage or mails, have been passed a distance of seven miles over the lower part of the road, between Richmond and Belmont, whence they connect with the Baltimore Railroad *via* the Junction Railroad. Express and other freight are also carried over the same route, avoiding the expense and delay of transhipment.

The passenger business has increased largely during the past year, both on the main road and on the branches and laterals worked by us. The aggregate number of passengers was 1,055,529.

All the staple articles of freight, such as iron of all kinds, lumber, iron ore, flour, grain, live stock, etc., exhibit a marked increase over last and previous years.

The business and revenue of the Lebanon Valley Branch Railroad have again largely increased in 1864; the road having carried 313,603 passengers, and 794,429 tons of freight, during the year. A piece of double-track, from Lebanon to Prescott, three and a half miles long, was completed October 24th, 1864, and will be extended three miles further, to Meyerstown, in the course of next month.

Ten passenger trains (five each way, daily) are now running over the Lebanon Valley Railroad; three of which connect daily, in each direction, with through passenger trains between New-York and Pittsburgh, over the Pennsylvania Railroad.

At this date the following lateral and branch railroads are worked by this Company:

Mine Hill and Schuylkill Haven, Little Schuylkill, Schuylkill Valley, Mount Carbon and Port Carbon, Mahanoy and Broad Mountain, East Mahanoy, Union, Good Spring, Mount Carbon, Lorberry Creek, Mill Creek,

Locust Gap. All of which are in the Schuylkill coal region, and on nearly all of which passenger-trains are run daily. Besides the above, are the Lebanon Valley Branch, Chester Valley, West-Reading, Port Kennedy.

All of which sixteen roads are opened by us, and have their expenses included in our accounts.

During the latter part of the season, several signal towers, alluded to in my last report, have been in use on the Main and Lebanon Valley Railroads, and have proved of great value in preventing accidents It is proposed to increase their number during the ensuing year at points where most needed.

Nine locomotives and seventy-two freight-cars were rebuilt in the Company's workshops during the year, their cost being included in the expenses of this department

☞ The Railroad and Insurance Almanac, for 1865. Edited by I. Smith Homans. *One volume, octavo*, 182 *pages*—price, $2. *Containing*:

I. Calender pages and Review of Important Events. II. Statistics of English Railroads, 1857–1864. III. List of Railroads in the United States—the Length and Cost of each. IV. Monthly Prices for forty years of Bar Iron, Pig Iron, Sheet Iron, Copper and Coal—1825 to 1863. V. On Railway Accidents. By Lord Brougham. VI. The Progress of Science—Recent Facts in relation to Railroads, Engines, Metals, Bridges, &c. VII. Recent Decisions in the Courts of New York, Massachusetts, Pennsylvania and Ohio, in reference to Railroads. VIII. Recent Inventions in Railroad Cars, Freight and Sleeping Cars, Brakes, Switches, Car Springs, Locomotives, Trucks, Couplings, Signals, &c. IX. The Iron Horse. X. Railroad Chronology, American and Foreign, from 1830 to 1860. XI. The Horse Railroads throughout the United States. XII. New and Projected Railroads in each State. XIII. Taxation of Railroads by the United States. XIV. List of Contributions to Periodicals on Railroads. XV. Massachusetts Report on, and Statistics of, Life Insurance. XVI. Insurance Law—Recent Decisions of the State of New York, Pennsylvania, Maryland, Massachusetts and Ohio. XVII. Statistics of Fire Insurance in London. XVIII. Marine Disasters of the years 1863–'4, with Estimates of Losses. XIX. The British Wreck Register for the year 1863. XX. Statistics of Marine Insurance in Hamburg for thirty years. XXI. List of Marine, Fire and Life Insurance Companies in the City of New York. XXII. Proposed International General Average.

Orders received at the Office of the Bankers' Magazine, New York. *Copies mailed to order*—price $2 00.

☞ At the annual election of officers of the Dubuque and Sioux City Railroad Company, Jas. Robb, Esq., was chosen President, and Mr. Platt Smith, Vice President.

North Missouri Railroad.—The bill passed by the Legislature in aid of the North Missouri Railroad, has been approved by the Governor and is now a law. It provides for a western branch to connect the road with St. Joseph, for the extension of the road to the Iowa line, and for the construction of a bridge across the Missouri. In order to raise the funds necessary for the prosecution of the works contemplated in the bill, the company is authorized to borrow money on a first mortgage of the road, to take the place of the State's lien.

New Railroad Project.—We direct attention to the route projected from Ottumwa, in Wapello county, through the counties of Mahaska, Jasper and Tama, and connecting with the Cedar Valley road at Waterloo. At Ottumwa, this road would, after the construction of a short line south to the State line, connect with a road leading to St. Louis The distance from Waterloo to Ottumwa is about 100 miles, and the country between the two places presents the most feasible and practical route for a railroad to be found in the whole State. At Oskaloosa, this line of road would connect with the Des Moines Valley Railroad, completed from Keokuk, at Grinnell, or some other point east of that, with the Mississippi and Missouri Railroad, and at Toledo or Iuka with the Cedar Rapids and Missouri River Railroad, and at Waterloo with the Dubuque and Sioux City Railroad, and the Cedar Valley Railroad, already completed and in operation to Waverly, designed to be pushed speedily through to St. Paul.

This projected route once completed, with its northern and southern connections, would furnish a direct and continuous line of rail from St. Paul to St. Louis, connecting with the latter city with a net work of railroads east and south, and extending to the City of New Orleans If our people look upon this project as the fanciful creation of some disordered imagination, the people of Toledo, Oskaloosa. Ottumwa, and other points on the line do not. This road, if constructed, as we have faith it will be, would be a prolific feeder to the Dubuque and Sioux City Railroad, at this place, and would as much as any one thing else hasten the erection of a bridge over the Mississippi river at Dubuque. It would give us a river market also, below the Rapids in the Mississippi river, which have been such a serious hindrance to the navigation of that great artery of trade and commerce.—*Waterloo (Iowa) Courier.*

Railroad Frauds.—A memorial of certain stockholders of the Amboy, Lansing and Traverse Bay Railroad was lately presented the Michigan Legislature setting forth certain gross frauds alleged to have been committed by those managing the road, especially by A. L. Williams, President, A. N. Hart, Vice President, and G. C. Munro, Treasurer. The memorial, which was numerously signed concluded as follows:

Your petitioners, therefore, pray that the Legislature of the State may inquire carefully into these matters, and give to your petitioners and other stockholders of said company, such relief as the nature of the case demands.

Chicago and Alton R. R. Co.—The stock and bondholders of this company will hold their annual meeting for the election of Directors and the transaction of other business at the office of the Company in this city on Monday the 3d of April next, at 10 o'clock in the morning. The transfer books will be closed March 23d and re-opened April 4th next.

Peat for Fuel.—The Syracuse *Journal* says that an experiment has been tried on the New York Central of using peat for locomotive fuel. A train of one car and locomotive was run a distance of twenty miles, consuming less than half a ton of peat, while the consumption of coal for a similar distance is never less than a ton. The peat was from near Fulton, Oswego county, There are one hundred and fifty acres of peat in the beds.

## MONETARY AND COMMERCIAL.

The money market, considered as a market, is about at a stand. For several weeks the demand for money has been rather more than the supply. The amount of currency has increased the last two weeks; but on the other hand, bankers have an indisposition to discount beyond the immediate necessities of the day. For this there are obvious reasons. The fall in gold is so rapid that it affects prices seriously, and bankers are not quite certain how far it is safe to go when many business men may find their resources much reduced. 10 to 12 per cent. are common rates of interest; but good paper may be had at higher rates.

The operators in pork must lose a great deal. Relying on what they supposed a short crop, they have held on till pork has fallen $10 per barrel. Nothing but an unexpected rise in gold can save them from heavy losses. Indeed, all holders of produce and large stocks of merchandise are in a difficult situation; for in a constantly falling market, it is almost impossible to avoid loss. One thing, however, is greatly in favor of the mercantile community; and that is, they never owed so little in many years. Hence, they may have losses and yet not injure their credit.

In the meantime, gold does not seem inclined to rise at present, although many persons supposed there would be a reaction. The following are the daily quotations for the week:

| | Opening | Highest. | Lowest. | Closing |
|---|---|---|---|---|
| March 9..... | 196 | 196¼ | 192½ | 192½ |
| " 10..... | 190¾ | 191⅞ | 186¼ | 189 |
| " 11..... | 190 | 191½ | 189¼ | 189¼ |
| " 13..... | 191 | 185⅞ | 187 | 186 |
| " 14..... | 184½ | 185⅝ | 178⅜ | 179¼ |
| " 15..... | 177⅝ | 178½ | 174⅜ | 174½ |

Thus we see that gold declined from 196 to 174½—being a total decline of 11½ per cent.

This is one of the heaviest continuous falls experienced in gold. It is quite probable there may be some reaction; but there is nothing in military events to encourage much reaction. Sherman has not only been heard from; but heard from under the most favorable circumstances. He reached *Laurel Hill*, a station on the Wilmington and Rutherford Railroad, 87½ miles from Wilmington, some days since, and is now doubtless, at Fayetteville on Cape Fear River. He has met with no serious obstacles, and lived on the country, and accomplished fully all that was intended to be done. There is no doubt he can continue his march, when ready, through North Carolina to Virginia. In the meantime, our troops have advanced from Newbern, defeated Gen. Bragg, taken Kingston and are advancing. The military situations are, therefore, cheering in the highest degree, and there is nothing to induce any advance in gold.

The Editor of the *Cincinnati Price Current* justly says:

"The inflation of the currency continues, and according to the theory of those sages who have been discussing the finances of the nation, and pointing out the "blunders" of the Secretary of the Treasury in inflating the currency, winding up all their essays with the sentence that "gold can not be put down unless the currency is contracted," gold ought to keep up, or indeed go higher, but it seems that there is something wrong in the machinery, for gold does decline, and produces the greatest emotion, notwithstanding that the currency machine at Washington is running night and day. The truth is Sherman and Sheridan are moving on Richmond, and are in this way crystalizing the currency, and some fine morning, not far distant, we will wake up and find it gold."

The following in regard to the tax on State Banks; and organization of National Banks may be interesting to some of our readers.

The text of sections six and seven of the new act relating to the taxation of State Banks and the conversion of the latter into National organizations, reads as follows:

SEC. 6. *And be it further enacted*, That every National banking association, State bank, or State banking association, shall pay a tax of ten per centum on the amount of notes of any State bank or State banking association paid out by them *after the 1st day of July*, 1866.

SEC. 7. *And be it further enacted*, That any existing bank organized under the laws of any State, having a paid up capital of not less than seventy five thousand dollars, *which shall apply before the 1st day of July next* for authority to become a National bank under the act entitled "An act to provide a national currency secured by a pledge of United States bonds, and to provide for the circulation and redemption thereof," approved June 3, 1864, and shall comply with all the requirements of said act, shall, if such bank be found by the Comptroller of the Currency to be in good standing and credit, receive such authority *in preference to new associations applying for the same*, provided, that it shall be lawful for any bank or banking association organized under State laws, and having branches, the capital being joint and assigned to and used by the mother bank and branches in definite proportions, to become a National banking association in conformity with existing laws, and to retain and keep in operation its branches, or such one or more of them as it may elect to retain the amount of the circulation redeemable at the mother bank, and each branch to be regulated by the amount of capital assigned to and used by each.

---

CHICAGO AND ROCK ISLAND RAILROAD.—Earnings 1864, $2 884,426; 1863, $1,959,267; increase, $925,159; 47.22 per cent.

Its profit and loss account stands thus:

| | |
|---|---|
| Receipts | $2,884.426 |
| Expenses at 60 per cent leaves net | 1,153,770 |
| Interest | 102,690 |
| Loans | 125,000 |
| Taxes and extra expenses | 150,000 |
| Remaining for stock | 776,080 |
| | $1,153,770 |

equal to 13 per cent, of which only 6 per cent has been paid.

## STAMP DUTIES.

The following is an abridgment of the new Tax Law which goes into operation August 1, 1864:

AFFIDAVITS in suits or legal proceedings shall be exempt from stamp duty.

AGREEMENT or contract, &c.—for every sheet or piece of paper upon which either of the same shall be written ..... 5 cts.

BANK CHECK, draft, or order—Drawn upon any bank, banker or trust company, or for any sum exceeding $10, drawn upon any other person or persons, companies or corporations, at sight or on demand ..... 2 cts.

BILL OF EXCHANGE (Inland)—for a sum not exceeding $100 ..... 5 cts.

For every addition $100, or fractional part thereof. 5 cts.

BILL OF EXCHANGE (Foreign) or Letter of Credit—drawn in but payable out of the United States, if drawn singly or otherwise than in sets, shall pay the same rates of duty as inland bills.

If drawn in sets of three or more: for every bill of each set, where the sum made payable shall not exceed $100 ..... 2 cts.

And for every additional $100 or fractional part thereof ..... 2 cts.

BILL OF LADING or Receipt, for any merchandise or effects, to be exported from the United States to any foreign port ..... 10 cts.

BILL OF SALE, by which any ship or vessel shall be conveyed to any other person, when the consideration shall not exceed $100 ..... 50 cts.

Exceeding $500 and not exceeding $1,000 ..... $1 00

Exceeding $1,000, for every additional amount of $500 or fractional part thereof. ..... 50 cts.

BOND—For indemnifying any person for the payment of any sum of money, when the money ultimately recoverable thereupon is $1 00 or less ..... 50 cts

When in excess of $1,000, for each $1,000 or fraction ..... 50 cts.

BOND for due execution of duties of office ..... $1 00

BOND of any description, other than such as may be required in legal proceedings, or used in connection with mortgage deeds, and not otherwise charged in this schedule ..... 25 cts.

CERTIFICATE of stock in any incorporated company ..... 25 cts.

CERTIFICATE of profits, showing an interest in the property of any incorporated company, if for a sum not less than $10 and not exceeding $50 ..... 10 cts.

Exceeding $50 and not exceeding $1,000 ..... 25 cts.

Exceeding $1 000 for every additional $1,000 or fractional part thereof ..... 25 cts.

CERTIFICATE.—Any certificate of damage or otherwise, issued by any port warden, marine surveyor, or other person acting as such ..... 25 cts.

CERTIFICATE of deposit of any sum of money in any bank or trust company, or with any banker, if for a sum not exceeding $100 ..... 2 cts.

For a sum exceeding $100 ..... 5 cts.

CERTIFICATE of any other description than those specified ..... 5 cts.

CHARTER-PARTY.—Contract or agreement for the charter of any ship or vessel, or steamer, between the captain, master, owner or agent, of the registered tonnage of such ship, or vessel, or steamer, does not exceed 150 tons ..... $1 00

Exceeding 150 and not exceeding 300 tons ..... $3 00

Exceeding 300 and not exceeding 600 tons ..... $5 00

Exceeding 600 tons ..... $10 00

CONTRACT.—Broker's note, or memorandum of sale of merchandise, stocks, bonds, exchange, notes of hand, real estate or property of any kind, issued by brokers, each note or memorandum of sale ..... 10 cts.

CONVEYANCE.—Deed, whereby any lands, tenements, or other realty sold, shall be granted, assigned, &c., when the consideration or value does not exceed $50 ..... 50 cts.

When the consideration exceeds $500, and does not exceed $1,000 ..... $1 00

And for every additional $500, or fractional part thereof, in excess of $1,000 ..... 50 cts.

ENTRY of any goods wares or merchandise at any Custom House, either for consumption or warehousing, not exceeding $100 in value ..... 25 cts.

Exceeding $100 and not exceeding $500 in value. 50 cts

Exceeding $500 in value ..... $1 00

ENTRY for the withdrawal of any goods or merchandise from bonded warehouse ..... 50 cts.

GAUGERS' RETURNS, if for a quantity not exceeding 500 gallons gross ..... 10 cts.

Exceeding 500 gallons gross ..... 25 cts.

INSURANCE (Life). Policy of insurance, or other instrument whereby any insurance shall be made upon any life or lives; when the amount insured shall not exceed $1,000 ..... 25 cts.

Exceeding $100 and not exceeding $5,000 ..... 50 cts

Exceeding $5,000 ..... $1 00

INSURANCE (Marine, Inland and Fire). Each policy of insurance, or other instrument, the premium upon which does not exceed $10 ..... 10 cts

Exceeding $10 and not exceeding $50 ..... 25 cts.

Exceeding $50 ..... 50 cts.

LEASE. Agreement or Contract for the hire, use or rent of any land, tenement, or portion thereof, where the rent or rental value is $300 per annum or less ..... 50 cts.

Where the rent or rental value exceeds the sum of $300 per annum, for each additional $200 or fractional part thereof in excess of $300 ..... 50 cts.

MANIFEST for Custom House entry or clearance of the cargo of any ship, vessel or steamer for any foreign port: if the registered tonnage of such ship, vessel or steamer does not exceed three hundred tons. $1 00

Exceeding three hundred tons and not exceeding six hundred tons ..... $3 00

Exceeding six hundred tons ..... $5 00

MEASURERS' RETURNS, if for a quantity not exceeding 1,000 bushels ..... 10 cts.

Exceeding 1,000 bushels ..... 25 cts.

MORTGAGE of lands, estate or property, real or personal, heritable or movable whats ever, or any personal bond as security for the payment of any definite or certain sum of money exceeding $100 and not exceeding $500 ..... 50 cts.

Exceeding $500 and not exceeding $1 000 ..... $1 00

And for every additional $500 or fractional part thereof in excess of $1,000 ..... 50 cts.

*Provided*, That upon each and every assignment or transfer of a mortgage, lease, or policy of insurance, or the renewal or continuance of any agreement, contract or charter, by letter or otherwise, a stamp duty shall be required and paid equal to that imposed on the original instrument.

PASSAGE TICKET by any vessel from a port in the United States to a foreign port, not exceeding $35 ..... 50 cts.

Exceeding $35 and not exceeding $50 ..... $1 00

And for every additional $50 or fractional part thereof in excess of $50 ..... $1 00

POWER OF ATTORNEY ..... 25 cts.

Power of Attorney of proxy for voting at any election for officers of any incorporated company .... 10 cts.

Power of Attorney to sell and convey real estate, or to rent or lease the same ..... $1 00

PROBATE OF WILL, or Letters of Administration: where the estate and effects for and in respect of which such probate or letters of administration applied for shall be sworn or declared not to exceed the value of $2 000 ..... $1 00

Exceeding $2 0 0, for every additional $1,000 or fractional part thereof in excess of $2,000 ..... 50 cts.

PROTEST.—Upon the protest of every note, bill of exchange, acceptance, check or draft, or any marine protest ..... 25 cts.

WAREHOUSE RECEIPTS for property, goods, wares or merchandise, not otherwise provided for in any public or private warehouse, when the property or goods so deposited or stored shall not exceed in value $500 ..... 10 cts.

Exceeding in value $500 and not exceeding $1,000. 20 cts.

Exceeding in value $1,000, for every additional $1 000 ..... 10 cts.

RECEIPTS for the payment of any sum of moneys or debt due exceeding $20, not being for satisfaction of any mortgage or judgment or decree of court, and a receipt for the delivery of any property ..... 2 cts.

WAREHOUSE RECEIPT for any goods, merchandise, or property of any kind, not otherwise provided for, held on storage in any public or private warehouse or yard ..... 25 cts.

WEIGHERS' RETURNS, if for a weight not exceeding five thousand pounds ..... 10 cts.

Exceeding five thousand pounds ..... 25 cts.

WRIT, or other original process by which any suit is commenced in any court of record ..... 50 cts.

Where the amount claimed in a writ issued by a court not of record, is $100 or over ..... 50 cts.

Upon every confession of judgment, cognovit, for $100 or over (except in those cases where the tax for the writ of a commencement of a suit has been paid 50 cts.

Writs or other process on appeals from justice courts or other courts of an inferior jurisdiction to a court of record ..... 50 cts.

WARRANT OF DISTRESS, when the amount of rent claimed does not exceed $100 ..... 25 cts.

When the amount claimed exceeds $100 ..... 50 cts.

*Provided* That no writ, summons or other process issued by and returnable to a Justice of the Peace, except as hereinbefore provided, or by any police or municipal court having no larger jurisdiction as to the amount of damages it may render than a Justice of the Peace in the same State, or issued in any criminal or other suits commenced by the United States or any State, shall be subject to the payment of stamp duties; *and provided further*, that the stamp duties imposed by the schedule B on manifests, bills of lading and passage tickets, shall not apply to steamboats or other vessels plying between ports of the United States and ports in British North America.

### MEDICINES OR PREPARATIONS.

For and upon every packet, box, bottle, pot, phial or other inclosure, where such packet, box, bottle, pot, phial or other inclosure, with its contents, shall not exceed, at the retail price or value, the sum of 25 cents ..... 1 ct.

Exceeding 25 and not exceeding 50 cents ..... 2 cts

Exceeding 50 and not exceeding 75 cents ..... 3 cts.

Exceeding 75 cents and not exceeding $1 ..... 4 cts.

Where such packet, box bottle or other inclosure, with its contents, shall exceed the retail price of $1, for each and every 50 cents or fractional part thereof over and above the $1, an additional ..... 2 cts.

For and upon every packet, box, bottle or other inclosure, containing any essence, extract, toilet water, cosmetic, hair oil, pomade, hair dressing, hair restorative, hair dye, tooth wash, dentifrice, tooth paste, aromatic cachous, or any similar articles, by whatsoever name the same heretofore have been, now are, or hereafter be called, where such packet, box, bottle or other inclosure, with its contents, shall not exceed, at the retail price, the sum of 25 cents ..... 1 ct

Exceeding 25 and not exceeding 50 cents ..... 2 cts.

Exceeding 50 and not exceeding 75 cents ..... 4 cts

Exceeding 75 cents and not exceeding $1 ..... 3 cts.

Photographs, ambrotypes, daguerreotypes or any sun picture, except as hereinbefore provided—upon

each and every picture of which the retail price shall not exceed 25 cents..... 2 cts.
Exceeding the retail price of 25 cents and not exceeding the sum of 50 cents..... 3 cts.
Exceeding the retail price of 50 cents and not exceeding $1..... 5 ts
Exceeding the retail price of $1, for every additional dollar or fractional part thereof..... 5 cts.
Playing Cards—For and upon every pack, of whatever number, when the retail price per pack does not exceed 15 cents..... 2 cts.
Exceeding the retail price of 18 cents and not exceeding 25 cents per pack..... 4 cts.
Exceeding the retail price of 25 cents and not exceeding 50 cents per pack..... 10 cts.
Exceeding the retail price of 50 cents and not exceeding $1 per pack..... 15 cts.
Exceeding the retail price of $1, for every addition $150 cents or fractional part thereof, in excess of a]..... 5 cts
Where such packet, box bottle or other inclosure, with its contents, shall exceed the retail price of $1, for each and every 50 cents, or fractional part thereof, over and above the $1, additional..... 2 cts.
Friction or lucifer matches, for each parcel or package..... 1 ct.
When in parcels or packages containing more than one hundred and not less than two hundred matches, for each parcel or package..... 2 cts.
And for every additional one hundred matches or fractional part th reof..... 1 ct.
For all cigar lights and wax tapers—double the rates herein imposed upon friction or lucifer matches.
*Provided*, That the stamp duties herein provided for on friction or lucifer matches made in part f wood, or on cigar lights or wax tapers shall not be imposed until Sept. 1, 1864; but until that time the tax shall be assessed and collected as heretofore; and on and after said Sept. 1 every package or parcel sold by any person, firm, company or corporation, shall he stamped as herein required.

CAR MANUFACTURING.—The Wason manufacturing company, at Springfield, Mass, have just completed six new cars for the Boston and New York line running through this city, at a cost to the line of $5,300 a piece. They contain all the modern improvements, including seats for 70 persons, and are among the handsomest cars ever issued from any workshop. The company has nearly completed four cars for the Portland and Kennebec railroad and two for the Shore Line; and has an order from the Pacific railroad for $100,000 worth of cars and one from the New Jersey Central for ten cars.


WRIGHTSON & CO.

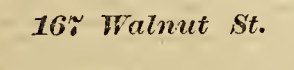
BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO.


## CHANGE OF TIME.

## Indianapolis and Cincinnati



THREE THROUGH TRAINS DAILY, as follows:

| | Leave. | Arrive. |
|---|---|---|
| St. Louis and Chicago Express..... | 6.30 A. M. | 10.15 A. M. |
| Springfield & St. Joseph Express ... | 1.00 P. M. | 5 00 P. M. |
| St. Louis & Chicago Express..... | 4 00 P. M. | 1.30 A. M |

Sleeping cars by this train for St. Louis and Chicago

ACCOMMODATION TRAINS.

| | Leave. | Arrive. |
|---|---|---|
| Lawrenceburg Accommodation..... | 4.25 P. M | 8 35 A. M. |
| Harrison..... | 9.00 A. M. | 3.00 P. M. |

Through Tickets can be obtained at the Spencer House, Burnet House and Gibson House Offices, and at the Depot.

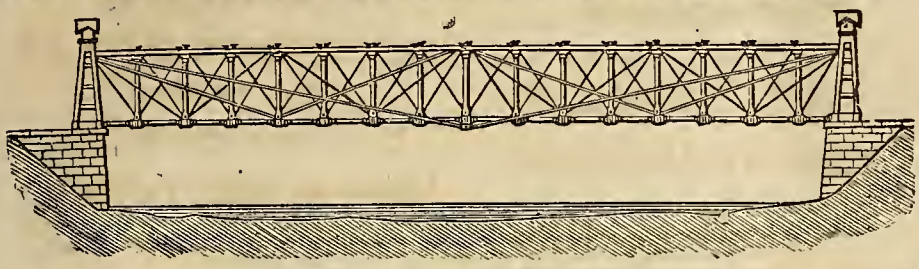
☞ Passenger Depot corner of Pearl and John streets, within a few squares of all the principal Hotels in the city.

ROBERT MEEK, Supt.

## General Ticket Agents of the Principal Railroads.

Atlantic & Great Western Railway.....T. H. Goodman, General Ticket Agent, Meadville, a.
Buffalo & Erie .....J. A Burch, General Ticket Agent, Buffalo, N. Y.
Buffalo, New York & Erie.....Wm L. Doyle " " " Buffalo, N. Y.
Buffalo & Lake Huron.....Thos. W Bussell, " " " Brantford, C. W.
Burlington & Missouri River Railway..L. Carper, " " " Burlington, Iowa,
Boston & Worcester.....L. K. Miles, " " " Boston, Mass.
Bellefontaine Railway Line.....Chas. Wood, Gen. Ticket Agent, Terre Haute, Ind
Boston & Providence.....James Dailey, Ticket Agent, Boston, Mass.
Baltimore & Ohio .....L. M Cole " Baltimore, Md.
Bost. Concord & Mont and Wh. M J. L. Rogers, " Plymouth, N H.
Chicago, Mil., LaCrosse & St. Paul.....A. V. H. Carpenter, Gen Ticket Agent, Milwaukee Wis.
Chicago, Burlington & Quincy.....Samuel Powell, General Ticket Agent. Chicago, Ill.
Chicago & R. Island and Miss. & Mo...W. L. St. John, " " " Chicago, Ill.
Chicago, Alton & St. Louis.....Joseph Price, Treasurer, Chicago. Ill.
Chicago & North Western .....E. P. Cutler, General Ticket Agent, Chicago, Ill.
Connecticut & Passumpsic Rivers....Nathaniel P. Lovering, " " " St. Johnsbury, Vt.
Chicago, Iowa & Nebraska.....Jas M. Ham, General Passenger Agent, Clinton, Iowa,
Central Railway of New Jersey.....H. P Baldwin. General Ticket Agent, 69 Wall Street, N. Y.
Catawissa Railway Co.....H H. Mc Jonnell. Freight and Passenger Accountant, Philadelphia, Pa.
Central Ohio.....John W. Brown, General Ticket Agent. Columbus, Ohio.
Columbus & Indianapolis R R.....F. Chandler, " " " Indianapolis, Ind.
Cincinnati & Zanesville.....E. S. Lowe. " " " Cincinnati "
Cincinnati & Chicago Air-Line.....L. H Walkley, " " " Richmond. Ind
Cheshire.....R. Stewart, " " " Keene, N. H.
Connecticut River Railway .....E Morgan " " " Springfield, Mass.
Cleveland, Painesville & Ashtabula....J. W. Cary, " " " Cleveland, Ohio.
Cleveland & Pittsburg.....F R. Myers, " " " " "
Cleveland & Toledo.....John U. Parsons, " " " " "
Cleveland, Columbus & Cincinnati....H C, Marshall, " " " " "
Cincinnati, Hamilton & Dayton.....P. W. Strader, " " " Cincinnati. "
Concord, Manchester & Lawrence.....Geo. G. Sanborn, " " " Concord N. H.
Dayton & Michigan.....P. W. Strader, " " " Cincinnati, Ohio
Dubuque, & South-Western.....Geo. W. Farley, Receiver, Dubuque Iowa.
Dubuque & Sioux City.....J. A. Pinto. General Ticket Agent, Dubuque, Iowa.
Detroit & Milwaukee.....Jas. H. Muir, Auditor, Detroit, Mich
Erie Railway.....Wm. R. Barr. General Passenger Agent. New York.
Eaton & Hamilton.....E. W. McGuire, General Ticket Agent, Eaton, Ohio
Evansville & Crawfordsville.....J. E. Martin, Secretary, Evansville, Ind.
Elmira & Williamsport.....Edmund B Smith General Ticket Agent. Elmira, N. Y
East Pennsylvania.....Philip M. Ermentrout, " " " Reading, Pa.
Erie & Pittsburg.....J A Burch, " " " Buffalo, N. Y.
Fitchburg Railway.....H. F. Whitcomb, " " " Boston, Mass
Great Central Railway Line.....F. Chandler, General Ticket Agent, Indianapolis, Ind,
Great Western Railway (Canada).....J. Charlton. Auditor, Hamilton, C. W.
Great Western Railway Co of 1859.....W. D Richardson, General Ticket Agent, Springfield, Ill
Grand Trunk Railway (Canada).....Henry Shackell, Auditor, Montreal, C. E
Hudson River Railway.....C. H. Kendrick, General Ticket Agent, New York.
Hannibal & St. Joseph.....P. B. Groat. " " " Hannibal, Mo
Indianapolis & Cincinnati.....F. B. Lord, " " " Indianapolis, Ind.
Indianapolis, Peru & Chicago.....V. T. Malott, Treasurer, Indianapolis, Ind
Illinois Central.....Wm. P. Johnson, General Passenger Agent, Chicago, Ill.
Indiana Central.....F. Chandler, General Ticket Agent, Indianapolis, Ind.
Jeffersonville.....Jas. Ferrier " " " Jeffersonville, Ind.
Kentucky Central.....H. P. Ransom, General Ticket Agent, Covington Ky.
Keokuk, Ft. Des Moines & Minn.....John Givin, " " " Keokuk, Iowa.
Little Miami and Columbus & Xenia..P. W. Strader " " " Cincinnati, Ohio.
Logansport, Peoria & Burlington.....E. M. Whitlock, Chief Clerk, Peoria, Ill.
La Crosse & Milwaukee.....J M. Kimball, General Ticket Agent, Milwaukee, Wis.
Louisv. & Frankfort and Lex. & F....Henry Sieffe, General Freight and Ticket Agent, Louisville, K
Lafayette & Indianapolis.....John M Kerper, General Ticket Agent, Lafayette, Ind.
Louisville, New Albany & Chicago....J. G. Williamson, " " New Albany, Ind
Louisville & Nashville .....D. A. Kean. Chief Clerk, Louisville. Ky.
Michigan Central.....Thos. Frazer, General Ticket Agent, Detroit, Mich.
Mich. Southern & Northern Indiana..C. P. Leland, " " " Toledo, Ohio.
Milwaukee & Prairie du Chien.....E. P. Bacon, " " " " "
Milwaukee & St. Paul.....F. W Spear, General Ticket Agent Milwaukee, Wis.
Marietta & Cincinnati.....Chas. F. Low, General Ticket Agent, Chillicothe. Ohio.
Montreal & Champlain.....J. F. Barnard, " " " Montreal. C. E.
New York Central .....E. F. Folger, Chief Clerk. Albany. New York.
New York, Harlem & Albany.....R R. Freeman, General Ticket Agent, New York.
Norwich & Worcester.....Edward T. Clapp, Secretary. Norwich, Conn.
Northern Central.....Edward S. Young. General Ticket Agent, Baltimore. Md.
New York & New Haven.....Jacob Mendel, " " " New York.
New Haven & Northampton.....E. A. Ray, Superintendent and Clerk, Westfield M
North Missouri.....Jas. H. Concannon, General Ticket Agent, St. Louis, Mo.
Northern (N. H.).....A. C. Warren, " " " Concord, N, H.
N. Haven, N. London & Stonington....Wm. T. Bartlett. " " " New Haven, Conn.
North Pennsylvania .....Ellis Clark, " " " Philadelphia, Pa
Northern New York.....Marshall Conant, " " " Malone, N. Y.
Ohio & Mississippi.....Chas. E. Follett, " " " Cincinnati, Ohio.
Philadelphia & Reading.....John Welch, General Ticket Agent, Philadelphia, Pa.
Pennsylvania Railroad.....H W. Gwinner, " " " " "
Pittsburg, Columbus & Cincinnati.....Ira A. Hutchinson, General Ticket Agent, Columbus, Ohio
Pittsburg, Fort Wayne & Chicago.....H. R. Payson " " " Pittsburg, Pa.
Pacific Railway, of Missouri.....E. W. Wallace. General Ticket Agent, St. Louis, Mo.
Philadelphia, Wilmington & Balt.....Geo. A. Dadmun, " " " Philadelphia, Pa.
People's Line of Steamers (N. Y. .....John C. Hewitt, " " " New York.
Providence & Worcester .....Wm. M. Durfee, " " " Providence, R I.
Portland, Saco & Portsmouth.....Eliphalet Nott, Treasurer, Portland. Me,
Quincy & Toledo.....W. D. Richardson, General Ticket Agent. Springfield. Ill.
Racine & Mississippi.....R. C. Tate. " " " Racine. Wis,
Rutland & Washington.....John McKeogh, " " " Rutland, Vt.
Rutland & Burlington.....Wm. A. Burnett " " " " "
Rome, Watertown & Ogdensburg.....H. T. Frary, " " " Watertown, N. Y.
Rensselaer & Saratoga.....O. N. Crandall, " " " Troy, N. Y.
Sandusky, Dayton & Cincinnati....J. M. Webster, " " " Sandusky, Ohio.
Sandusky, Mansfield & Newark.....H. M. Bronson, " " " " "
Saratoga & Whitehall.....J H. Sternbergh, " " " Saratoga Springs, N
The United States Mail Line Co.....Thos. Sherlock, Treasurer, Cincinnati, Ohio.
Terre Haute, Alton & St. Louis.....Jas. B Ralston, General Ticket Agent, St. Louis, Mo.
Terre Haute & Richmond.....Chas. Wood, Secretary, Terre Haute, Ind
Troy & Boston .....C. W. Moseley, General Ticket Agent, Troy, N. Y.
Toledo & Wabash.....J. E. Carpenter, Cashier, Toledo, Ohio.
Vt. & Can., Vt. Central, and Sullivan H. H. Locklin, General Ticket Agent, St. Albans, Vt.
Western (Mass.) Railway .....M. Griggs, " " " Springfield. Mass
Worcester Nashua.....M. Wiver, " " " Worcester, Mass.

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

**For plans and particulars, apply to**

mar. 5, '63. 1y. **Letter Box, 1393.** **C. J. SCHULTZ, Pittsburgh, Pa.**

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27.1y

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive &c.

419 y[illegible]

## KNOX & SHAIN,
## Engineering and Telegraphic

INSTRUMENT MAKERS,

**PHILADELPHIA**

## JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

## MACHINERY.

OF EVERY DESCRIPTION

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS.

**Either Single or Double Plate,**

**With or Without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

Manner, at the Shortest, and on the

**Most Reasonable Terms.**

## Manufacturers, Importers & Dealers

—IN—

## RAILROAD, CAR,

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

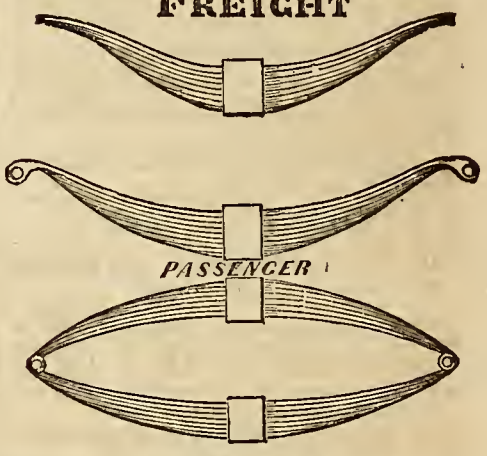
## MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

## RAILWAY SPRINGS.

**FREIGHT**




THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL he pledges himself to furnish a Spring of the greatest elasticity, an one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI, O.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

## W. M. F. HEWSON,
## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock. Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT.

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY

W P. SMITH, *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes Ag't. Bellaire, O.*
J. M COLE. *Gen. Ticket Agent. Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINCTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St, Louis and Cairo Mail | 6:50 A. M | 1:10 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M & 8:00 P. M.
Two trains Sunday, leaving at.... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run hy me TWELVE MINETES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 89 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M Street

C. E FOLLETT, General Ticket Agent.

W D. GRISWOLD, General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Paute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Sept. 2. MOSELEY & CO.

BOSTON, MASS

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

## Lewistown, Mifflin Co., Penn'

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Fines**—from 1¼ to 10 inches outside diameter, on to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1 to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!!



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P M.; 11 30 P M night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M. (Express).

On Sundays, 10.24 P M.

☞Through connections made for all points East an Wes

WM. TEARNS SUPT.

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, MARCH 23, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Cincinnati Express | 6.00 A. M. | 7.30 P. M. |
| Mail | 9.00 A. M. | 8.15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11.30 A. M. |
| Morrow Accommodation | 6.20 P. M. | 8.00 A. M. |
| Night Express | 10.00 P. M. | 10.05 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky Mail | 7.00 A. M. | 5.45 P. M. |
| Dayton & Toledo | 7.00 A. M. | 9.45 P. M. |
| Cin. & Chicago Air Line Express | 7.00 A. M. | 9.45 P. M. |
| Dayton Accommodation | 2.20 P. M. | 5.45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5.00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7.00 P. M. | 12.35 P. M. |
| Hamilton Accommodation | 7.00 P. M. | 8.05 A. M. |
| do do | 10.00 A. M. | 6.45 A. M. |
| *Marietta & Cincinnati—* | | |
| Mail Express | 7.40 A. M. | 7 00 P. M. |
| Chillicothe Accommodation | 3.30 P. M. | 11.30 A. M. |
| *Ohio & Mississippi—* | | |
| Louisville, St. Louis and Cairo Mail | 7.00 A. M. | 11.30 P M. |
| St. Louis and Cairo Express | 6.00 P. M. | 5.00 A. M. |
| Louisville, St. Louis and Cairo Express | 7 40 P. M. | 8.20 A. M. |
| *Indianapolis & Cincinnati—* | | |
| St. Louis and Chicago Express | 6.30 A. M. | 11.00 A. M. |
| Mail | 1.00 P. M. | 5.00 P. M. |
| Night Express | 4.00 P. M. | 1.50 A. M. |
| Lawrenceburg Accommodation | 4 25 P. M. | 8.35 A. M. |
| Harrison Accommodation | 9.00 A. M. | 3.00 P. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Morning Express | 9 00 A. M. | 7.30 P. M. |
| Accommodation | 4.00 P. M. | 8.05 A M. |
| *Kentucky Central,—* (City time.) | | |
| First Train | 6.00 A. M. | 10.40 A. M. |
| Second Train | 2.00 P. M. | 6.00 P. M |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton. Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## CINCINNATI & ZANESVILLE R. R.

We infer, from some things we have seen and heard, that we are likely to have a new *through line* to Lake Erie and Pittsburgh. It is well known that the Cincinnati and Zanesville Road, though lying in a rich, fertile country and built comparatively cheap, has not proved profitable. On the contrary, it has been sold out and is in the hands of trustees for the benefit of the bondholders. The present owners no doubt see very clearly what the difficulty is and will try to remedy it. The fact is the Cincinnati and Zanesville road has no terminus. It begins no where and ends no where. It begins nominally at Morrow, on the Little Miami Railroad, and ends at Zanesville on the Ohio Central. Then there can be no *through business* on the road; for neither of the roads on which it terminates has any interest in giving it any. The *Ohio Central* brings its eastern business to Columbus on the Little Miami road, for by so doing it carries it 60 miles further on its own road. In the same manner the Little Miami Railroad carries its business to Columbus. It is impossible that the Cincinnati & Zanesville road *can* be profitable till it finds a *terminus* somewhere which it can control. From some signs we think a plan is on foot to accomplish this. At any rate we shall suggest what seems a good plan. It is known that there is a road in the northern point of the State called the *Cleveland & Zanesville Road.* This road begins on the Pittsburg and Cleveland Railroad, at Hudson, 28 miles from Cleveland, and terminates at Millersburg, Holmes County; a distance of 61 miles. At Millenburg there is no connection with any road, and the company was much embarrassed and unable to go on. In fact, the Cleveland & Zanesville Road was in exactly the same condition as the Cincinnati and Zanesville Road, beginning no where and ending no where. We observe that the Cleveland & Zanesville was sold by order of court, and we presume bought in by parties in the interest of the Cincinnati & Zanesville Road. In addition, we see that books are opened in Cincinnati for the subscription of the stock of the Cleveland and Zanesville Railroad. From these signs and indications, we infer that the road from Millersburg to Zanesville is about to be finished. The distance from Millersburg to Zanesville is about 50 miles, the whole route lying in the valley of the Muskingum River and passing through Cohocton. The road could no doubt be made for $1,500,000; and would double the business of the two parts already made. It would meet the Pittsburg and Fort Wayne Road, at Wooster, and make a connection for that road with Cincinnati and the Ohio Valley, which it has not now. We should think that the combined interests of the Cincinnati and the Cleveland ends of the road, and of the Pittsburg & Fort Wayne Railroad would be sufficient to complete the line through Zanesville, from Cincinnati to Lake Erie. But when that is done, another question will arise of equal importance—where will this road really terminate on the Lake or in Cincinnati? Probably the lake termination can be as it is; the interests of the Cleveland and Pittsburg not being opposed to that of the Cleveland & Zanesville. But there is a much better termination of this road then Cleveland. This is at Fairport, just below Cleveland, where a good connection can be made with Canada. We have sketched out here a plan which we believe to be in process of execution; and which at any rate is certainly necessary to the profitable working of either of the roads to which we have referred. The Cincinnati and Zanesville Road is 130 miles complete from Morrow to Zanesville; and the Cleveland and Zanesville from Hudson to Millersburg is 61. Thus we have 191 miles completed of an entire line from Cincinnati to Lake Erie. If both ends are completed to Cincinnati and the Lake, it will take about 120 miles of new road. If only the intermediate link is made it will be 50 miles only. We hope the road will be completed, and as the ultimate cost of the whole line will really be low, in comparison with many roads, it must, we think, be profitable.

## LOCOMOTIVE REFORM.

Since the "Rocket" was placed on the Liverpool and Manchester Railway by George Stephenson, some five and thirty years since, very little, if any change has been made in the principle of the locomotive engine. The outlines have been somewhat altered, and the power has been considerably increased, but the principle remains unchanged. The only serious alteration that has been made is the tank engine, but even here there is a total absence of any vital change of principle. Locomotives continue to be made in their present form because they have been found to answer the purposes for which they are designed, and because their improvement is a matter of risk and expense. The responsibility of any deviation from the beaten track rests upon manufacturers and superintendents of railway locomotives, and is sufficient to deter them, under ordinary circumstances, from departing from what they know to be a reliable system. But this does not necessarily involve a belief that the present practice of locomotive engineering is finite, or that it has at all approached the limit of ultimate improvement. The contrary of this is the inevitable conclusion to which a due consideration of the locomotive must lead, and those who are best qualified to form an opinion on the matter are strongest in support of such a conclusion.

There are two special items connected with the present locomotive system which involve railway companies in a heavy daily outlay. These are, first, the carrying, or unremunerative wheels in the ordinary locomotive—unremunerative because, as far as their tractive force is concerned, they are powerless—and next, the heavy six-wheeled tenders which accompany the engine, and which are useful only so far as they carry a store of fuel and water. That these evils are already fully acknowledged is proved by the attempts which have been, and still are being, made to overcome them. The serious nature of these items

consist not only in their first cost, but also in the constant expense of wear and tear, and liability to accident, while their equivalent in weight being equal to so many loaded passenger carriages, or goods wagons, would, if thus disposed of, yield a considerable revenue for every train mile run.

The attempts to overcome these evils are shown, not only in the number of new tank engines, but in the conversion of tender engines into tank engines, having their wheels coupled in order to dispense with the carriers or rollers. From these striking facts the following influences are deducible, viz.: that tank engines are the most economical, or their adoption would not be so universal, and that weight on the rails is necessary to obtain traction power. Hence the reason for converting the carrying into motive power wheels, by coupling, and thus, by placing less individual weight on each wheel, the destruction to the permanent way and wheel tyres is greatly reduced, as compared with the single pair of driving wheels, usually overloaded to enable them to bite the rails.

It is no very difficult task to prove that there exists a necessity for a radical change in the present system of locomotive construction. The tank engine is good in its way, but is at best only adapted for short runs with light loads, where a sufficiency of water and fuel can be carried without overloading the wheels, and for velocities not exceeding 25 to 30 miles an hour. But under the present system no one would venture to construct a tank engine to draw heavy loads from Rugby or Peterborough to London. To do so would require a tank, and coal bunkers, of the necessary capacity to carry water and fuel sufficient for such a trip without stopping, and thus the wheels would be so overloaded that they would not be able to run at all. Were it possible to do this the injury resulting to the permanent way and wheel tyres would be enormous. The difficulty of overloading the wheels by the tank and bunkers might be got rid of by distributing the weight over a larger number of wheels, but then the distance between the leading and trailing wheels would be too great, causing enormous side friction, and increased danger in running round curves. To obviate this the bogie principal has been introduced, but with very questionable result. When the bogie is adopted in eight wheeled engines it is found to be of very little use, inasmuch as the framing of the driving and trailing wheels is distinct, from that of the bogie, and the boiler, being stayed to the framing, is perfectly rigid for the whole of its length. The bogie pin is fixed on the smoke-box end of the boiler, and so the bogie wheels can only run in the plane of the direction given to them by the framing and boiler. But these bogie do swivel occasionally, while their not doing so generally shows that it must take a very sharp curve, necessitating a great deal of force, to move them. If the two pairs of trailing wheels could be arranged to swivel like the leading ones the case would be very different, for them the trailing wheels would accommodate themselves to the curves on which they might happen to be traveling without influencing, as at present, the plane or direction of the leading wheels. But it is simply impossible to place a bogie frame beneath the fire-box end of the boiler as at present arranged, and, if possible, the difficulty would be to transmit the power of the engine through the wheels with movable centres, to the rails.

The weight of material required to construct a tank and fuel bunkers on an engine capable of carrying the same amount of water and fuel as a tender, would be one ton for every ten tons required for the tender itself, nearly the whole weight of the tender being comprised in the wheels, axles, springs, and framing. If such a tank and bunkers were placed on an engine it would bring about 11½ tons additional weight on the wheels. This would comprise 25 cwt. of material, 7½ tons of water, and 3 of fuel. This extra weight could not with safety be placed on the six wheels, four tons being the safest and most economical working weight that should be placed on each wheel. This may be increased to 5 or even 5½ tons on each wheel, but to go beyond this is to inflict serious injury on the permanent way. In passenger engines on some lines, however, as much as 16 tons has been put upon the driving wheels in order to get bite, and the average may be taken at 14 tons; but this has been found so destructive, both to the way and the tyres, that, where possible, passenger engines are built with four driving wheels instead of two, which gives more tractive force and less wear on the wheels and rails. It is true that, by coupling two pairs of wheels, there is a loss of power, but this is more than compensated for by the extra weight gained on the rails; so of two evils the less has been chosen, weight on the rails being important for heavy traffic. This is considered so much so in France and Austria, that as many as eight or ten wheels are coupled, with a weight of from 40 to 50 tons on the rails, but this arrangement is advantageous only on lines having curves of large radii.

On heavy inclines it is absolutely necessary to obtain the utmost bite, as instanced by the double engines, made by Messrs. Stephenson some five years since, to work the Ghaut incline on the Great Indian Peninsular Railway. This engine was composed of two ordinary engines, coupled at the foot plates, the object being to obtain great weight on the rails and consequently great tractive power. This could not be obtained in a single engine, because it would require a boiler of enormous dimensions to generate sufficient steam for supplying one pair of cylinders of equal power to the two pair otherwise used. The weight of this boiler and fittings could not be supported on six wheels, and a greater number, in order to be made effective on the rails, would have to be coupled, and the following evils would arise: overloaded wheels, great loss of power through friction, and a wheel base too long for running round ordinary curves with safety. On the double principle, each engine working independently on its own frame and wheel base, renders its power and weight, and is capable of suiting itself to the curve on which it is traveling the couplings between the engines acting as a joint. Double engines, however, necessitate extra men to drive them, which is, of course, an additional expense.

Under the present system, therefore, it is in a measure impossible to increase the wheel-base in order to obtain, not only more effective weight on the rails, but to do away with the costly and cumbersome tender; and apparently for these three reasons—firstly, to couple four pairs of wheels together entails great loss of power by friction of the parts; secondly, extra weight cannot be put on the wheels without injury to the rails and wheel tyres; and lastly, if the wheel base is increased, the chances of an engine leaving the rails when running on a curve, are greatly increased.

Very great advantages would further accrue to railroad companies if engines were so constructed that the principal parts could be interchangeable. An engine, when not in the repairing shop, is worth so much per day to a company, which must be lost while idle for repairs. Besides, on the principal lines of railway, a considerable reduction could be made in the staff of workman required in the repairing shops, if the parts were made interchangeable. These parts should be principally the boiler, framing, and wheels, as each of these, not only being the principal parts themselves, have the remaining portions of the engine fitted to them. By constructing engines so that they could easily be taken asunder, and the faulty parts changed for duplicates, would only necessitate the detention of the engine for a few hours in the shop. But, taking the existing class of engines, the objection which here arises is, that the boiler, wheels, axles, and framing, are so essentially made part and parcel of each other that no one portion is distinct in itself without the other.

Enough has already been said to prove that much could be done in saving the every day expenses of railway companies, and it appears strange that locomotive engineers have never attempted some change towards the removal of the objectionable tender, or the introduction of duplicate parts. But the truth is, that, irrespective of responsibility to be incurred, the demands upon the time of a locomotive engineer, are such as to leave him but little margin for the consideration of any revolutionary measures if he were so inclined, and so he is content, if not compelled, to continue in the old track.

But, after all that has been said on the subject, it is satisfactory to be enabled to point out a way of escape from the trammels of a system which can raise such insuperable objections to any and every point of improvement advanced. If this, that, or the other, being pressing necessities, can not be done under one system, it is wise to consider how far another system ensuring their accomplishment should be adopted. If, under the old well-digested principle, the locomotive is helpless to fulfill the conditions the advancements of the age demand of it, then it is clearly time to initiate the adoption of any proposition bearing on its face evidence of mature consideration in design, and a fitness for its intended purpose. An arrangement calculated to overcome all the obstacles herein enumerated would prove a great boon, not to railways alone, but to the public in general, who are becoming more and more identified with them and their interests. With the view of meeting these contingencies, and of overcoming the manifest evils of the present locomotive system Mr Fairlie, the engineer-in-chief of the Central Railway of Venezuela, has proposed a novel arrangement of locomotive Therein he proposes to effect the required improvements, and in the following manner. Firstly, by the construction of the boiler, which is so arranged that according to Mr. Fairlie, a greater generating and maintaining power can be obtained than by any possibility can be by the existing system. Secondly, by the whole weight of the engine, including fuel and water, being made available on the rails for tractive power. Thirdly, by tenders being entirely dispensed with as useless, unremunerative and costly. Fourthly, by the general arrangement of the engine complete, by which it is enabled to pass round any curves down to a radius of one and a half chains with the greatest facility, and the friction due thereto is reduced to a minimum. Fifthly, by doing away with the necessity for turntables at termini and at locomotive depots;

and, Sixthly, by reducing the expenses of the repairing shops to a minimum, together with the expenses arising from a want of a system of duplicates, as, by the plan he proposes, the most complete system of duplicates can be carried out.

If this new principle be found practically to embody all the inventor claims for it—and reason is not at variance with favorable expectations—it will indeed successfully surmount the obstacles which at present so impede railway traction, and will in itself constitute a great stride in the perfecting of the locomotive engine. The question has been taken up by several eminent engineers, and locomotives upon Mr. Fairlie's principle are in course of construction. One railway company at least has adopted the system. It may therefore not he long before opportunity is afforded for judging how far practice will coincide with theory in respect of this invention.—[*London Mechanics' Magazine.*

## THE CHEY-AIR BRIDGE, MADRAS RAILWAY.

A paper was recently read before the instition of Civil Engineers, an abstract of which we take from the *London Mechanics' Magazine.* The author remarked that the river Chey-Air presented the usual features met with in nearly all the large rivers of Southern India. The banks were generally low and ill-defined, and the bed, for almost the entire width, and to an unknown depth, consisted of clean sharp sand. For nine months during the year the bed was perfectly dry, being subject only to heavy floods in the months of May, June, and November; but even during the driest seasons, the substratum was always charged with water to within two or three feet of the surface. The bridge was situated on the North-West line, at a distance of 143 miles from Madras; the extreme width of the river at the point of crossing was 3,360 ft., the drainage area being about 2,272 square miles, and the fall of the stream at the rate of 11 ft. per mile. At a distance of 20 chains above the bridge, the river separated into two distinct channels, that on the south being 1,600 ft. in width, and that on the north 1,256 ft. in width, and at the point of crossing the bank dividing the two was 467 ft in width. The highest point of this bank was 5.57 ft. above the bed of the river, and 2.27 ft. higher than the general level of the land for some distance on each side of the river. As it was ascertained that the highest known flood only covered the bank to a depth of 4 inches, it was determined to make this portion of the work a solid embankment, and to span the two arms of the river by distinct bridges; that on the south contained twenty-two openings, while that on the north had sixteen openings, each 70 ft. span from centre to centre of the piers.

The piers were built of masonry, laid on timber platforms, placed within dams, at a depth of 15 ft. below the bed of the river, the superstructure being composed of ordinary boiler-plate girders. In commencing the operations, the sand over the site of the intended dam was first removed, until the water was reached. The dimensions of the dam, 52 ft. by 22 ft., being then set out, piles, 9 inches square, were driven at intervals of 10 ft., to a depth of 18 ft., the heads being cut off level with the water. The piles were secured by waling-pieces, and were strongly braced across. Close planking, 2½ inches in thickness, was next let down behind the piles, and the space around the dam was backed up with clay and grass sods, to prevent the sand from slipping in. The Picottah pumps were afterwards fixed at intervals of 3 ft. along three sides of the dams, being supported on sleepers, hedded on clay, one end of each sleeper resting on the waling-pieces. Each dam was surrounded by a wooden trough, for receiving the water raised from the foundation pit, and this trough communicated with a channel cut to a depth of about 5 ft. at the commencement, and terminating on the surface at a distance of 50 chains down the river. This was rendered possible by the fall of the river, 11 ft. per mile, and the lift was thus reduced from 15 ft. to 10 ft. The Picottah pump was much used in many parts of Southern India for irrigation purposes, and it had been found very efficient for emptying foundation pits. It consisted simply of a balance lever, one end of which was weighted, by a man walking up and down the lever, while to the other end a bucket was suspended by a long bamboo, another man standing on a staging in the dam, guiding the bucket and filling and emptying it. The bucket was made of thin sheet iron, and was capable of containing about 5 gallons. Two well-trained men would raise on an average about 35 gallons per minute, where the lift did not exceed 9 or 10 ft. At the Chey-Air bridge, it was found necessary to use at each dam thirty-six of these pumps, worked by a gang of seventy-two coolies, who were relieved every six hours, and who raised on an average 1,560 gallons per minute, the mean lift being from 7 to 8 ft.

The timber platforms were of aucha and eloopay, both close, hard grained woods; and, being entirely protected from the alternate action of air and water it was believed they would be very durable. These platforms were 42 ft. in length by 13 ft. in width; the main beams and transverse pieces were 12 in. square, and over these there was a flooring of sleepers 10 ft. long and 10 in. by 6 in. in section. On this flooring heavy courses of well-bedded, hard, slaty magnesian limestone, the blocks varying in size from ½ to ¾ of a cubic yard, were built in hydraulic mortar, and well grouted, up to within 18 in. of the bed of the river, and, therefore, about 18 in. above the lowest level to which the water subsided in the sand. Above this point, the masonry consisted of a light-colored magnesian lime-stone, obtained from a quarry situated 2½ miles from the work, and which was delivered at the bridge by a native contractor, at the rate of 5s. 6d. per cubic yard, subject to a deduction of one-seventh for bad stacking. No appreciable settlement was noticed after the first course of masonry was laid. The piling and the timber around the dams had, in every instance, remained undisturbed; and the space between them and the masonry had been filled in with waste stone to the depth of 9 ft. The works had withstood the monsoons during three years, without showing the slightest indication of any scour; in fact, after heavy floods, no alteration took place in the bed of the river.

The total cost of preparing a single dam, with timber platform complete, ready to receive the masonry, was—Pile driving, £24 3s. 6d.; excavation £38 13s.; pumping, £50 2s.; timber platform, £37 9s.; total cost, $150 7s. 6d. The bridge contained 16,320 cubic yards of masonry, executed at a cost of £18,681. The works were commenced on the 13th of August, 1860, and were completed ready to receive the girders on the 16th of January, 1862.

Respecting the character of the work yet to be done, it was stated that it would be merely a repetition of what had already been executed in the case of several large bridges on the same line of railway. In illustration, the superstructure of the bridge over the river Cavery was alluded to, the spans and all essential particulars being identical. The girders were continuous over two spans, and were thus 140 ft. in length. They were ordinary boiler plate girders so proportioned as to give a maximum strain of 5 tons per square inch on the extended parts, and of 4 tons per square inch on the compressed parts. Each length of 140 ft. was composed of three portions; the central one was 30 ft. in length, and had its centre over the middle pier, while the two ends were each 55 ft. in length, and extended to the centres of the two adjacent piers. The position of the joints were determined by calculation to be at about the points of contrary flexure, in various stages of distribution of the load. The three pieces were joined together on a platform adjacent to the abutment; and when this was accomplished, the two griders were connected by cross bracing, and by a system of longitudinal bracing, formed of a "herring-bone" arrangement of half timbers, bolted to the under side of the cross-bearers, by which the rails were carried. It was found, by experiment, that when the ordinary T iron cross bracing alone was fixed, the vibration of a pair of girders could be increased to about 5 in., by the application of a moderate lateral force isochronous with these vibrations; whilst on the addition of the herring-bone bracing, it became impossible to produce any appreciable vibration by such means. For the purpose of getting the girders into their places, at the top of each pier two frames were erected, each carrying two rollers in the lines of the centres of the girders. To the underside of the latter, rails were attached, with their running faces downwards. The girders were first lifted, by jacks from the platforms, when several rollers were fixed on the platforms, and the girders were then allowed to rest on the rollers. The girders were next hauled forward by a powerful crab tackle placed on one of the piers in advance, and so were ultimately taken to the farther end of the bridge; the remainder being successively hauled over in succession. Having thus always two bearing points, with the centre of gravity between them, there was no tendency to tilt, and no necessity for staging or scaffolding—a material advantage in the case of rivers subject to sudden floods of extreme violence.

THE NEW JERSEY CENTRAL RAILROAD AND THE COAL TRADE.—TO THE EDITOR OF THE HERALD.—*Office Central Railroad Company of New Jersey, New York, March* 15, 1865. —An article appeared in your paper of the 15th inst., headed "Anticipated Rise in Coal," and commencing "It is announced that the coal trains on the New Jersey Central Railroad have been stopped, and the engines laid up for repairs," etc.

This article and others of similar tenor that have appeared in the papers, not only of this city, but also of New Jersey and New England, are totally without foundation. The coal trains are and have been running as usual, bringing down from three thousand five hundred to four thousand five hundred tons per day. We do not yet know who have interested themselves to give such wide publicity to so unfounded a rumor; but, as you say, "it looks very much as if there was a grand speculative scheme afloat," probably to frighten the public and further inflate the price of coal.

JOHN TAYLOR JOHNSTON, President.

## DESTINATION AND DISTRIBUTION OF AMERICAN GOLD.

In this time of financial confusion and commercial alarms, it will be well to be informed on all the great facts regarding the production and distribution of gold and silver. It has been generally supposed that the exportation of gold from New York showed nearly the whole amount. This is far from being the fact. More than two thirds the gold produced on the Pacific coast is now shipped from San Francisco direct to foreign ports. The shipment of coin now is falling off mainly, we suppose in consequence of the shipment of *bonds* instead of gold. The sale of bonds in Germany has been very large. So we suppose that the shipment of gold this year will be much less than it was last year:

The destination of the gold leaving San Francisco has greatly changed within three years past, as regards the proportion sent primarily to the Atlantic cities. The actual sums to each country can be given only from 1854 forward, the account being for calender years.

| | *Treasure sent from San Francisco to—* | | | | | |
|---|---|---|---|---|---|---|
| Year. | New York. | England. | China. | Panama. | Other countries. | Total. |
| 1854..... | $46,532,166 | $3,781,680 | $965,887 | $204,592 | $560,908 | $52,045,633 |
| 1855..... | 38,730,564 | 5,182,156 | 889,675 | 230,207 | 128,120 | 45,161,731 |
| 1856..... | 30,895,294 | 8,666,289 | 1,308,852 | 158,268 | 573,732 | 50,697,434 |
| 1857..... | 35,531,778 | 9,347,743 | 2,993,264 | 410,929 | 692,978 | 48,976,697 |
| 1858..... | 35,891,276 | 9,265,739 | 1,916,007 | 299,265 | 175,779 | 47,548,026 |
| 1859..... | 40,146,437 | 3,910,930 | 3,100,716 | 279,949 | 202,390 | 47,640,462 |
| 1860..... | 36,719,296 | 2,672,936 | 3,374,680 | 300,819 | 258,185 | 42,325,916 |
| 1861..... | 32,628,011 | 4,061,779 | 3,541,279 | 349,769 | 95,920 | 40,676,758 |
| 1862..... | 26,194,035 | 12,950,140 | 2,660,754 | 434,508 | 322,324 | 42,561,761 |
| 1863..... | 10,389,330 | 28,467,256 | 4,206,370 | 2,503,296 | 505,667 | 46,071,920 |
| 1864 to Oct. 1.... | 8,745,277 | 28,364,870 | 5,813,208 | 277,382 | 571,822 | 43,772,559 |

The countries not named are the Hawanan islands, Manilla, Mexico, British Columbia, and small amounts to Havana, Guatemala, &c. In 1862 a peculiar movement began, primarily as a measure of security against pirates, in the transit from the Isthmus on the Atlantic. This was the sending of large sums to England not cleared or recorded as exports, but declared to be on account of eastern holders, and ultimately intended to be returned to New York. Not being entered as exports at the custom-house at San Francisco, the extent of the movement was not observed until it had been carried through most of two fiscal years. The following were the reported and the actual exports of coin and bullion to foreign ports from San Francisco:

| | Reported. | Actual. | Unusual export. |
|---|---|---|---|
| Fiscal year 1862-'63.. | $13,529,755 | $21,737,634 | $18,207,879 |
| Fiscal year 1863-'64.. | 6,235,055 | 42,023,000 | 35,734,945 |
| Quarter ending Sept. 30, 1864..... | 2,876,000 | 11,040,612 | 8,764,612 |

This diversion of treasure from its usual course to New York is large, and it does not, so far at least, return in any form of remittance of precious metals back to New York from England. Much of it may be, and probably is, held as undrawn deposits abroad, or used when the market favors to create exchange, and thus pass as absolute sale. It is not, however, a commercial remittance in an ordinary sense, not being sent in the adjustment of balances, or in any way for the account of foreign owners.

No important or decisive effect on the stock of specie in the Atlantic cities, resulting from this movement, appears in the current statements of the stock of coin and bullion in the banks and government depositories at New York. The best calculation of this stock, derived from official statements as far as they can be made available, gives the following aggregates on November 1, 1864, and at the same date for five years previous:

*Specie in banks and sub-treasury of New York.*

| | |
|---|---|
| November 1, 1859..... | $25,300,000 |
| " 1, 1860..... | 27,900,000 |
| " 1, 1861..... | 50,700,000 |
| " 1, 1862..... | 40,801,000 |
| " 1, 1863..... | 38,370,251 |
| " 1, 1864..... | 33,958,867 |

The stock of the precious metals was thus greater in November, 1864, than in any year previous to 1861, and it was eight millions greater than the average of 1859 and 1860.

Including the above named sums of unusual export of specie from San Francisco to England, the four fiscal years, 1860-'61 to 1863-'64, show an annual average going to foreign countries of $42,168,669, in excess of the quantities imported; while the four previous years, ending June 30, 1860, gave an average export of $51,020,625 in excess of all imports. The annual excess of specie exports, in other words, was less in the last four year than in the like period ending in 1860 by $9,951,956—nearly ten millions of dollars—annually.

A proof of the absence of any undue commercial drain of specie to Europe is afforded in the rates of exchange prevailing in the New York market, which were, when quoted in gold, constantly below the par from June to October, 1864. The average nominal rate was 108½ to 109, the par being nearly 109½.

It is a remarkable fact, also, that for part of 1863, and particularly during 1864, extreme difficulty has been experienced in retaining the usual stocks of bullion and coin in the Bank of England and other national banks of Europe. The drain to the continent and to the east has taken all the available supplies received from America and Australia as fast as brought, many of the shipments, indeed, being sold for export before their arrival. The Bank of England raised its rate of discount no less than eight times during the year, for the sole purpose of stopping the drain of specie from it vaults. The very unusual discount rate of 9 per cent. was maintained for two and a half months, and 8 per cent. for three months; the average for a year, from November, 1863 to November, 1864, being 7½ per cent. The Bank of France had difficulties scarcely less; its rate of discount having been frequently raised to 8 per cent., and special purchases of gold being several times made to maintain the bank. A like condition prevailed in every capital and monetary centre of Europe, the average rate of discount at the national banks having been maintained at nearly or quite double the usual rates.

Generally the rate of interest for current commercial purposes has been much higher in Europe for the year referred to, and particularly in England, than in the United States; whereas it is usually but little more that half the prevailing rates here. The purpose of the high rates established by the Bank of England and other national establishments being the retention of gold against an exhausting drain, which would otherwise deplete their vaults so as to render the maintenance of specie payments impossible, the above facts are directly pertinent to the question of the retention and control of our own production of gold.

In Europe the cause of the drain appears chiefly to be the unusual extent of purchases of cotton and other raw materials for manufactures Egypt, India, China, and other distant countries, to which the return of manufactured goods is insufficient to pay for these purchases. Cotton and other of these raw materials advanced greatly in price, and therefore large sums were required to move them; and, in addition, an unusually active speculative movement in them has been continued for a long period.

The general result of the movement in gold has, therefore, been to reduce the stocks held in reserve in England and France quite as much as the reserve has been reduced in the United States. As compared with 1860 the reduction in London is greater than in New York, and the relation of gold to general commerce and finance is in ampler proportions and on a safe footing in the United States than in either England or France, at the close of 1864. Tables are appended showing the rates of exchange on England prevailing at New York, and the rates of discount or interest both in the United States and Europe.

---

RAILROAD CONNECTION BETWEEN CAPE GIRARDEAU AND CHICAGO.—Many of our most prominent citizens are moving in the matter of a railroad from the east side of the river, opposite the city, to connect with the Illinois Central Railroad at a point somewhere in the vicinity of Pulaski, which, it is said, can be reached in fifteen miles. We are told that some time ago the Central road offered to lay down the rails if our citizens would grade and put on the ties. This offer is doubtless yet open, as it would greatly benefit the Central road. In addition to this, we would suggest that our City Council appoint a committee to visit Chicago and lay the matter before the Merchants Exchange, representing the advantages of such a connection to that city. In this way substantial aid may be procured. Our city purchases annually not less than $1,500,000 worth of goods, to say nothing of the immense supplies of cotton, tobacco, furs, wheat, and corn, which are shipped away in return. We are told the road can be run on level ground nearly the whole distance. By all means let us have a railroad connection with Chicago.

Since the above was in type, a meeting of our citizens was called by the Mayor to assemble at Turner's Hall last evening, in order to take action on the subjects above enumerated.—[*Cape Girardeau (Mo) Argus.*

## THE DRAIN OF BULLION

FROM EUROPE TO THE EASTERN NATIONS.

There is nothing more curious, and to financial and commercial men more puzzling, than the constant drain of the precious metals from Europe to Asia. The following article we extract from a report of the Treasury Department on "Foreign and Domestic Commerce." It gives the statistics of this drain, and probably the correct cause of it. It is that China and India having three fold the population of Europe, with an industrious people, must of course, when exchange of products is open between these countries, drain on Europe for bullion, till China and India are *equally well supplied;* and we can not tell how long that may be.

The reader will find this an interesting article:

IMPORTS FROM BRITISH INDIA.

| Articles. | 1859. | 1860. | 1861. | 1862. |
|---|---|---|---|---|
| Cotton | £3,901,109 | £3,339,076 | £9,334,115 | £21,913,774 |
| Hemp, jute etc | 837,167 | 671,176 | 729,172 | 906,834 |
| Indigo | 1,619,604 | 2 220 119 | 2 605 634 | 1,784,5 4 |
| Seeds | 2,334,898 | 2,075,274 | 1,971,449 | 1,751,001 |
| Silk | 296,263 | 60,805 | 136,705 | 438,572 |
| Sugar | 1,101,716 | 939,026 | 821,458 | 368,493 |
| Tea | 132,255 | 230 064 | 165,964 | 161,768 |
| Wool | 462,100 | 699,861 | 614,999 | 742,807 |
| | 10,695,108 | 10,235,491 | 16,379,286 | 28,087,805 |

"The steady rise in value to an aggregate of $60,000,000 in 1857, producing a drain of silver, was one of the causes of the revulsion in that year. Since then the purchases of Indian produce, mostly cotton, have risen to $90,000,000 in 1862, while in 1863 England imported cotton from India to the enormous value of $200,000,000.

"The quantity of silver annually exported from England and the Mediterranean to Asia has been as follows, per English official reports:

| Year. | England. | Mediterranean. | Total. |
|---|---|---|---|
| 1851 | $8,362,500 | ..... | $8,362,500 |
| 1852 | 12,116,210 | .... .... | 12,116 216 |
| 1853 | 23,550 000 | $4,240,000 | 27,790,000 |
| 1854 | 15 555,000 | 7.255,000 | 22,821 000 |
| 1855 | 32 075,000 | 7,620,0 0 | 39.695,000 |
| 1856 | 60,590,000 | 9,950,000 | 70,540,000 |
| 1857 | 86,477,170 | 10,180,291 | 96 657,461 |
| 1858 | 25,444,250 | 16,150,000 | 31,594,250 |
| 1859 | 33,298,120 | 7,340,280 | 40 638,400 |
| 1860 | 40 620,182 | 8.120,204 | 48 740,386 |
| 1860 | 36,399,175 | 7.980,000 | 44,379,175 |
| 1862 | 52,551,045 | 9,150,000 | 61,701,045 |
| 1863, six months | 21,156,614 | 11,737.271 | 32,993,781 |
| | 450.305,102 | 88,723,046 | 539.029,209 |

"France, although the richest country of the world in the precious metals, has, since 1848, parted with $165,947,253 of silver, and taken in exchange gold. This is the case with England, Russia, and the United States, who no longer hesitate to encourage and extend their trade with the non importing population of Asia, although at a hazard of a drain of silver coin. The trade of California with China is more reciprocal, owing, it is supposed, to the new demands for American provisions and manufactures, which the Chinese immigrants, attracted by the mines to our Pacific coast, carry back with them to China. But in India, notwithstanding a century of British occupation, the apathy of the natives —their aversion to any exchange except for silver—seems unbroken. To this condition of the market ethre has been added, during the last ten years, an investment of $50,000,000 of English capital in the railroads of Hindostan, which has greatly contributed to the influx of silver.*

"From the time of imperial Rome bullion has flowed from west to east, and Pliny complained that India was the "sink" of the precious metals. Gibbon has also observed that this continuous drain was "a complaint worthy of the gravity of the senate;" and Humboldt, estimating the produce of the South American mines in the beginning of this century at $43.000,000, states that $25,000,000 were sent to Asia. The tendency to hoard the precious metals partakes of the proverbial immobility of the Asiatic character. Silver is less used in India for purposes of luxury and ornament than in Europe; and it is probable that silver, and perhaps gold, will continue to be the leading article of import until the whole Asiatic world, with its population of six hundred millions of souls, shall be in possession of the same money supply relatively which is found in European or American states. This proportion between population and its industry on the one hand, and the medium of commerce recognized by the world, once established, then, and perhaps not before, will the Oriental torpidity be succeeded by new and more advanced modes of traffic. The population of Great Britain is computed at 30,000,000, with an amount of gold and silver in circulation assumed to be £80,000,000; and this amount is found essential, notwithstanding the great extension of paper substitutes for coin. The circulating medium of India in 1857 was about £80,000,000, but the population of India is 180,000,000, or sixfold that of Great Britain. India can, therefore, absorb £400,000,000 in addition to the amount she is now supposed to hold before she will exceed the monetary level of Great Britain.

"France affords a more impressive illustration of the inevitable absorption of the precious metals by Asia before the monetary equilibrium will be adjusted between the Orient and the Occident. The population of France is, in round numbers, 36,000,000; its specie supply 6,000,000,000 francs, or about £264,000,000. The population of India will therefore require £1,320,000,000 to reach a circulation of coin proportionate to that of France.

"But this is not all. It is estimated that there are 600,000,000 Asiatics, fully equal as to industrial capacity to the people of India; many of them—the Japanese and Chinese especially—superior to the Hindostauese. Before the orientals reach the monetary level of England, they must be in possession of £1,600,000,000, while to attain an equality with France no less than an aggregate of £4,000,000,000 must be permanently absorbed by the 600,000,000 Asiatics, who are soon to be brought into close commercial relation with christendom.

"The capital and industry of Europe and America were never so active as now. How immeasurable, under the impulse of machinery, is the energy and the amount of production. Fully proportionate is the exigency of distribution and the development of commerce; and as money is the grand instrument both of production and distribution, it must be permitted to diffuse itself proportionately. Until every land is saturated to the full standard of Europe and the United States, there will be no excess of supply from the mines of all the continents. The golden age is here but we stand only on its threshold."

* See the Bankers' Magazine. Journal of the Money Market, and Commercial Digest, Jan., 1864, London. p. 19.

—The Western Railroad of Massachusetts makes the following exhibits of earnings in 1863 and 1864:

| Years. | Passengers. | Freight. | Other sources. | Total. |
|---|---|---|---|---|
| 1863 | $837 611 | $1,479,874 | $118,227 | $2,435,712 |
| 1864 | 1,143 318 | 1,739,796 | 111,884 | 2 994,998 |
| Inc. | $305,707 | $259,922 | (dec. $6,343) | $559,286 |

The expenses for 1864 are $611,134 81 greater than for 1863. An aggregate of 99,792,980 passengers or tons of freight carried one mile in 1864, against 85,758,268 passengers or tons of freight carried one mile in 1863. The cost of transportation for each passenger and each ton of freight one mile this year has been 1.822-1000 cents against 1.407-1000 cents in 1863; or assuming the cost of transporting each ton of freight to equal the cost of two passengers the same distance, we find the cost this year to be 1.154-1000 cents per passenger and 2.308-1000 cents per ton for freight, against 865-1000 cents per passenger and 1.730-1000 cents per ton for freight per mile in 1863.

THE SAN FRANCISCO AND WASHOE RAILROAD. —The Chief Engineer of this enterprise, which has recently been incorporated in California, has issued his first report It refers entirely, of course, to the character of the route of the contemplated work. The proposed line lies chiefly between the Cosumnes and American rivers, the initial point being at Placerville. From that point the road is to be carried along the north bank of Big Canon, across Wild Goose and various other canons, and along numberless creeks to the summit of the Sierra Nevada, which it is to cross at an elevation of 7,373.74 feet above tidewater, thence descending by different gradients and directions to the eastern State line's intersection with Kingsbury's Toll Road, 91.92 miles from place of beginning. It is claimed that there is less snow to be encountered on this line than any other across the mountains; that the first cost will be less, the gradients lighter, curves easier, less snow line, more general directness between Placerville and Virginia City, and its location in the great channel of trade between California and Nevada. The estimated cost of the entire road, from Placerville to the divide between Carson and Washoe Valleys, 121 miles is $8,726,568.—[*Reese River Reveille, Feb.* 6.

## BELLEFONTAINE RAILWAY LINE.

By legal action of the Directors and Stockholders of the B. & I and I., P. & C. railroads in November and December last, a consolidation of the two roads was perfected, and they are now worked under the new organization as "The Bellefontaine Railway Company.".

The forthcoming report of the President, (on behalf of the Board of Directors,) of the operations of this road during the past year, will prove a document of general interest as well as of special interest to those immediately concerned in the road. It will show that so admirably has it been managed, that neither the road-bed, track, rolling stock nor material, are in worse condition than before the wonderful increase in travel and shipments of freight of the past two years, but to the contrary. "The expenses of the year," says the report, "particularly in the improvement of the track and equipment, have been very large, but the expenditure has been necessary and judiciously made. The line has not been, at any previous time, in as good condition to meet the requirements of its continually increasing traffic as at the present time." From this something may be learned.

The business of the line for the year 1864, is stated as follows:

B. & I. RAILROAD.

| | | |
|---|---|---|
| Earnings from passengers | | $336,976 43 |
| " " freight | | 609,441 43 |
| " " mail | | 17,850 00 |
| " " express | | 12,612 35 |
| | | $976,881 21 |
| Working expenses | $697,813 36 | |
| Interest and taxes | 102.706 36 | |
| | | 800,519 72 |
| Balance | | $176,361 49 |
| Balance from 1863 | | 141,513 85 |
| Total surplus | | $317,875 34 |
| From which the following extraordinary expenses have been paid:— | | |
| Renewals of engines | $33,447 00 | |
| " fr'ght cars | 36,225 00 | |
| " pass'r cars | 2,512 00 | |
| Cost of wood lands | 15,066 64 | |
| | | 87,250 64 |
| Balance | | $230,624 70 |
| From this balance has been paid: | | |
| July and Jan. dividends | $162,058 34 | |
| Redemption 1st mortgage bonds | 1,000 00 | |
| Deposit for 2d mortgage bonds | 50,000 00 | |
| Payment of car loan | 12,764 30 | |
| | | 225,822 34 |
| Balance surplus | | $4,802 06 |

COMPARISON.

| | |
|---|---|
| Earnings of 1864 | $976,881 21 |
| Earnings of 1863 | 751,221 81 |
| Increase | $225,659 40 |

This is divided as follows: Increase in passengers, $133,244 33; increase in freight, $94,223 95; making a total of $227,478 28; and deducting from this the decrease in express, $1,818 88, we have the balance, $225,659 40.

| | | |
|---|---|---|
| Working expenses of 1864 | | $697,813 36 |
| " " 1863 | | 389,688 72 |
| Increase | | $308,124 64 |

This increase in expenses is principally in the track and equipments, in both of which there have been internal improvements.

I. P. & C. RAILROAD.

The transaction of this road for the year present the following results:

| | | |
|---|---|---|
| Earnings from passengers | | $352.084 94 |
| " " freight | | 460,073 80 |
| " " mail | | 10,625 00 |
| " " express | | 8,979 38 |
| Total | | $771,763 12 |
| Working expenses | $463,930 97 | |
| Interest and taxes | 100,054 13 | 565,985 10 |
| Balance | | 207,778 02 |
| Surplus of 1863 | | 144,016 76 |
| Total surplus | | $351,794 78 |
| Extraordinary expenses paid:— | | |
| Renewals of engines | $23,844 00 | |
| " ft. cars | 25,785 00 | |
| " pass'r cars | 1,788 00 | |
| New fair grounds | 336 60 | |
| Wood lands | 7,589 64 | |
| Indianapolis shops | 60,285 57 | 119,628 81 |
| Balance | | $232,165 97 |
| Paid July and Jan. dividends | | 108,328 39 |
| Surplus | | $123,837 58 |

COMPARISON WITH PREVIOUS YEAR.

| | |
|---|---|
| Earnings of 1864 | $771,763 12 |
| Earnings of 1863 | 598,092 21 |
| Increase | $173,670 91 |

This is divided as follows: Increase on passengers, $113,767 51; on freight, $61,197 82; total, $174,965 33; deduct decrease on express, $1,294 42, and the balance is $173,670 91.

| | |
|---|---|
| Working expenses of 1864 | $463,930 97 |
| " " 1863 | 247,567 45 |
| Increase | $216,363 52 |

The Board voted the distribution of six per cent. The financial condition of the consolidated company, and the material condition of the line, is all that any concerned need wish for. Of course the sound business management and administrative ability of Governor Brough, who is the President of the road, is responsible, in a great measure, for this prosperity.

We make the following extract from the report of the Board of Directors:

It is due to the stockholders that the Directors should more fully allude than they have heretofore done to the policy they have adopted and the reasons that have governed it. The embarrassments of both roads from 1855 to 1862 were of a serious character, at the time threatening the loss of the property. The earnings were light, and one reason for this was the small amount of motive power and other road equipments. The same trouble existed on our connecting roads, so that we could not draw upon them for assistance. The first thing was, by rigid economy, to arrange for our indebtedness—funded and floating—so as to make certain the interest on the one and absorb the other. In doing so, large temporary loans were resorted to, upon which the Directors became individually liable. These have all been paid off, while the funded debt has been diminished instead of increased The next object was to increase our equipment and power, and as we did so, we rapidly increased our earnings. No debt was created; but finding this object a vital one with us, we held, perhaps, too rigid an economy upon other expenditures, and particularly those of the roadway. The track and bridges were always kept safe, and the line has always had a remarkable immunity from accidents. But rails wore rapidly under our increased traffic. The Bellefontaine and Indiana road had sixty miles of compound rail, which was found to be a failure. This must all be renewed, and this process was commenced in 1861. Having protected our indebtedness and put it upon a sound basis; having more than doubled our original equipment,—the next object was to improve, by as rapid a process as was consistent with our means, the roadway and structures. To this end heavy expenditures were made in 1863, and much larger ones incurred in 1864. During the latter year we have kept within the limit of ability to return a six per cent. dividend to the stockholders, though we have somewhat reduced our previous surplus. It will be observed that our ordinary running expenses have increased only in the proportionate increase of wages, while our large increase is in our track, bridges, buildings and fences. All this has been necessary to the interests of the stockholders. The same policy should rule during the current year. The results of last year's operations are beginning to be felt; and another season of large repairs will put the property in a condition that will admit of reduced expenditures thereafter; and at the same time economise expenses in the working of the line. We trust the stockholders will appreciate this, and find the *future* results satisfactory.

RAILROAD MEETING.—The General Ticket Agents' Association held their regular meeting Friday, March 10th, at the St. Nicholas Hotel, New York. Mr. J. B. Ralston, of the St. Louis, Alton and Terre Haute Railroad, was chosen President; Mr. Wm. R. Barr, of the Erie Railroad was elected Vice-President, and Mr. Samuel Powell, of the Chicago, Burlington and Quincy Railroad, Secretary. The proceedings of last meeting were read and approved. Thirty-three of the most important lines in the United States were represented, and one Canadian company.

ALLEGHENY VALLEY RAILROAD.—The *Pittsburg Gazette* says:

The Alleghery Valley Railroad has been leased to the Mahoning and French Creek Railroad Company, a recently formed and chartered organization, and the new arrangement will go into operation on the first of April. The new company contract to put under construction immediately, at each end of the road, ten miles of track, and to complete as rapidly as possible the twenty six miles yet remaining unfinished If they can easily obtain labor, this work will be done within a year. This road will be one of immense importance to this section of the country, particularly when it is completed out through the oil regions, as it will then bring directly to this city the oil which accumulates in such vast quantities during the winter, when the navigation of the Allegheny river is closed, and a great portion of which is now diverted to New York city. Statistics have shown that the Pittsburg interest in this trade amounts to three or four millions of dollars per annum, and no effort should be spared to secure to our city the rich revenue arising from it.

## THE SILVER MINES OF NEVADA.

We clip the following from a pamphlet recently published, on the mineral resources of Nevada, youngest of the sisterhood of States:

A retrospective view of her mining developments shows results unparalleled in the history of metallic discoveries. The Comstock lead, in Virginia City, is hardly prospected, and yet the few well-worked and paying mines have yielded millions of capital. They have built cities, established governments, territorial, local, and State, constructed roads, erected mills, and made improvements in every direction. The earnings, which in the past have been expended in the necessary preliminary labors of a commencement of the work, will, in the future, be devoted to dividends. The Gould & Curry mine alone, the outcroppings of which were discovered in the autumn of 1859, has added $15,000,000 to the treasure of the world. One great fact in the history of silver mining should not be lost sight of, and that is this: Wherever, in any part of the world, silver mines have been worked they are worked now, unless arrested for some explainable cause. The lack of machinery, the existence of war, and the incursions of Indians, have, in Mexico, familiarized our minds with the idea of abandoned mines. But they have all been abandoned for some other cause than that they are exhausted. We know of no silver-mining region in the world which has given out. The mines of Mexico, originally worked by the native Aztecs, before the Spanish conquest, are worked still. The mines of the Andes have given forth their wealth for more than three centuries. The mines of old Spain have been worked from the middle ages, and are in working condition now. In Hungary, the same mines worked by the Romans before the birth of Christ still yield their steady increase. The mines of Freiburg, in Saxony, worked from the eleventh century, know no diminution. In Bohemia, Tyrol, Norway, and Sweden, in the Ural and Atlas mountains, and, indeed, wherever the discoveries of silver have been made, we believe, without exception, the mines continue to be worked to the present day, and are generally more productive now than at any time in their past history. There are, of course, exceptional instances—there have been worked many mines with loss to the owner. But silver mining, for permanence and rich return, has had its parallel in no other business.

Wherever silver has been found, there spring up great cities, wonderful improvements, and all the evidences of opulence. Gigantic fortunes have rewarded the early discoverers, and for generations their decendants have reaped the never-failing harvest of annual returns. The discoveries of Washoe equal the most famous and fabulous of silver mines. Potosi owes its prosperity to no richer deposits than underlay the town of Virginia, while surrounding discoveries only prove a common fact in silver mining, that silver districts are generally of considerable extent.

The prospects of Nevada were never more brilliant than now. Her existence is no longer an experiment; it is a great and recognized fact, challenging the attention of the world. The Pacific Railroad will, in a brief time, bring her mines to the gates of the sea. One thousand men are this day grading the road for the iron track, and ten millions of capital is provided for the prosecution of the work. When this work is completed, every dollar of expenditure is halved, and every dollar of earning is doubled to the silver-miner.

## THE LEHIGH VALLEY RAILROAD.

ANNUAL REPORT FOR OFFICIAL YEAR ENDING NOVEMBER 30, 1864—ITS ENLARGEMENT AND EXPANSION BY CONSOLIDATION.

Since the last annual report this company has incorporated with itself the Beaver Meadow Railroad and the Penn Haven and White Haven Railroad. The consolidation and merger of the Beaver Meadow Company with ours, was by agreement entered into by the directors of the two companies on the 18th of June last, acting under the authority of the law passed by the Legislature of Pennsylvania, on the 16th of May, 1861, entitled an "Act relating to Railroad Companies:" the said agreement was submitted to a meeting of the stockholders of the respective companies called for that purpose on the 5th and 6th days of July last, and the consolidation and merger was unanimously ratified and adopted by the stockholders of both companies, and was filed in the office of the Secretary of the Commonwealth, at Harrisburg, on the 8th of July, and thereupon the consolidation and merger of the two companies, was accomplished according to law.

The Beaver Meadow Railroad, with double track, extends from its junction with our road at East Mauch Chunk, up the Lehigh river to Penn Haven, and from thence to the Beaver Meadow and adjoining mines in Carbon county, and to Honey Brook colliery in Schuylkill county, a distance of about 24 miles. By the union of the two companies in one corporation, we become owners of a considerable body of coal land near Beaver Meadow village, which formally produced large quanties of the best anthracite coal; we also become thereby legally possessed of all the rights, privileges and franchises theretofore vested in either company.

The Beaver Meadow Company; though authorized by charter to mine and sell coal, has long since ceased to exercise the right to do so, and this company sees no reason to change that policy.

By virtue of the authority of the said act of 16th May, 1861, similar arrangements were entered into with the Penn Haven and White Haven Railroad, that company having completed a railroad along the Lehigh river, from its junction with the Beaver Meadow Road, just below Penn Haven, to White Haven, a distance of about 17 miles. Articles of consolidation and merger were entered into by the directors of the respective companies on the 12th of July last, and submitted to the stockholders on the 2d of August, and the same was unanimously ratified and adopted by both companies, and filed according to law, on the 5th of August, in the Secretary of the Commonwealth's office. By which acts the three several railroad companies became one corporation, under the corporate name of the "Lehigh Valley Railroad Company." The railroads thus incorporated extend from the east bank of the Delaware river at Phillipsburg, along the valley of the Lehigh river from its mouth to White Haven, a distance of 71 miles main stem, and the Beaver Meadow branch from its junction with the main road below Penn Haven to the collieries, 17 miles, making 88 miles of a railroad, nearly all double track, with extensive sidings and turnouts. At Penn Haven we also connect with the Hazleton Railroad. That road extends into the Hazleton and Black Creek coal fields. At White Haven we connect with the railroad to Wilkesbarre, from which we receive, beside the ordinary freight and passenger traffic, a considerable amount of coal and lumber, with a prospect of a very large increase, this being the shortest and best railroad route from the Wyoming Valley to Philadelphia or New York.

Thirteen miles above Mauch Chunk the Lehigh and Mahony Railroad connects with our branch road to Beaver Meadow, and extends from thence westwardly into the great Mahony coal field, and is already opened some 20 miles, furnishing us with considerable coal tonnage, and as it is being extended further into the coal basins of that region, promises to be one of our most valuable feeders. By our own branches and the several railroads connecting with ours, we reach the coal in the Mahony, Beaver Meadow, Hazleton, Black Creek, and Wyoming coal fields. from all of which we receive a large coal tonnage. Our extension to White Haven has also opened an extensive trade in lumber, and all of the extensions alluded to tend to swell our miscellaneous freight and passenger business, so that since these avenues have been opened our receipts have greatly increased over the corresponding months of the previous year.

By our own subscription to the stock of the Lehigh and Mahony Railroad Company, and the acquisition through the merger of the Beaver Meadow Company, of over 3,000 shares of that stock, we now own 4,629 shares, amounting at par to $231,450, and it is deemed to the interest of this company to give further assistance as required to extend and stock that road.

Notwithstanding the great addition made by the purchase, of both cars and engine, to our rolling stock during the year, and the large supply received from the Beaver Meadow Company, we have been unable, during most of the season, to furnish as many cars, especially coal cars, as required. One cause of the deficiency has been, that a large amount of coal goes beyond the terminus of our road, to New York and Philadelphia. Some of the connecting roads that participate in this trade have been very deficient in furnishing their quota of cars. When our extensive shops, now being built at Burlington, below Mauch Chunk, are completed, we hope to be able to furnish all the cars required.

The very great extension of our road by consolidation, and the necessary expenditure made to meet the wants of a trade that has so largely increased within the year, has required a corresponding increase of capital.

The stockholders of the respective companies that have been merged in ours, are entitled to one share of stock in this company for every one they held in either of the companies so merged. That exchange has progressed to a very considerable extent; when completed the capital stock of the Lehigh Valley Railroad Company, representing all the property of every kind owned by each of the three companies before consolidation, will amount to.....$6,634,650

The bonded debt of the Lehigh Valley Railroad Company before consolidation was..... 1,477,000

Making a total of.....$8,111,650

Neither of the companies merged had any bonded debt.

The report in detail of the Superintendent and Engineer, showing the operations of the company during the year ending on the 30th of November last, is herewith appended. Respectfully submitted by order of the Board.

WM. W. LONGSTRETH, *President.*

RECEIPTS AND EXPENDITURES.—The following is a statement of the receipts and expen-

ditures, copied from the annual report of the Superintendent and Engineer, Robert H. Sayre, Esq.:

| | Receipts. | Expenditures. |
|---|---|---|
| From coal transportation..... | $1,498,118 35 | $171,192 90 |
| " Passengers " ..... | 213 925 46 | 109,043 60 |
| " Freight " ..... | 284,365 52 | 124,808 90 |
| Total ..... ..... | $2,396 409 33 | $1 005,135 50 |
| Net..... ..... | $1,391,273 79 | |

The receipts and expenditures of Beaver Meadow Division, from August 1st, are included in the above.

Compared with last year, the receipts from coal show an increase of $822,572 70, or 76.5 per cent; from passengers, an increase of, $95,475 91, or 80.6 per cent; from freight an increase of $108,284 92, or 61.5 per cent. Increase in gross receipts, $1,026,333 53, or 74.9 per cent; increase in expenses, $416,-035 91, or 70.6 per cent; increase in net receipts, $610, 297 58, or 78.1 per cent.

## NORTHERN CENTRAL RAILWAY CO.

ANNUAL MEETING OF THE STOCKHOLDERS.

The regular annual meeting of the stockholders of the Northern Central Railway Co., was held on Thursday, Feb 23, at Calvert Station Baltimore, to elect a Board of Directors for the ensuing year. After the organization of the meeting, the annual report of the President, J. D. Cameron, Esq., was submitted and read.

The report shows a prosperous condition of the company, and largely increased receipts for the past year. The earnings from all sources were $3,051,669 15, and the expenses $1,966,282 52, leaving the net earnings $1,-085,386 63; out of which have been paid, for interest on funded debt and exchange, $295,-613 58; for dividend of 11 per cent on the capital stock, $345,830 60; for taxes on capital stock and dividends, $33,911 54; for sundries, $21,161 21, and to the sinking fund, $55,561 55, leaving a net revenue of $333,-308 15.

A large increase in the equipment has been secured, and the ability of the road to meet the constantly growing business offering greatly augmented. Owing to the large amount of transportation which the War Department of the Government required the company to perform, the coal tonnage to this city has fallen of 75,000 tons being delivered here in 1864, against 107,000 tons in 1863. This deficit in the aggregate coal tonnage added to the natural increase, could it have been carried, would have much more than counterbalanced the earnings from government patronage. This exhibit of a falling off in the tonnage in a profitable trade, constantly increasing in production and consumption, because of the inability of the road to enjoy it, and at the same time to respond fully to the wants of the government, will astonish those who have thought the continued prosperity of this road was contingent on a continuance of the war, and large government patronage.

That the source of revenue has not amounted to so much as their legitimate coal trade, which was of necessity neglected, will be apparent when it is remembered that the rates of coal are remunerative, while the government pays one-third less for the transportation of troops and supplies than was allowed by the rates of 1861. While the company has taxed its capacity to meet the pressing wants of the government, and that willingly, to do so it has been forced to forego a business legitimately its own, of much greater value. The double track is progressing favorably, notwithstanding the scarcity and high price of labor and material, the completion of twenty-five miles of the double track is announced. These twenty-five miles are now in daily use, and the President reports that the balance of the double track between Baltimore and York is almost entirely graded and ballasted, and will be entirely completed during the early part of the coming summer. *The double track between Dauphin and Sunbury is partially completed, and it is expected to be in use during the year.*

The President indulges the hope that an amicable arrangement with the Mayor and City Council of Baltimore, mutually beneficial will soon be made, to enable the company to extend their track to tidewater at Canton.

Parties have been anxious to lease the coal lands controlled by the company in the Shamokin region, but to secure this coal trade to Baltimore it is deemed best to maintain this control, and for this reason all offers which looked to diverting this trade to other points have been rejected.

The number of passengers and troops carried during the year was 1,032,617; the number of lives lost of the above number was two, and those lost their lives by standing on the platform while the cars were in motion.

The large outlay in placing the road in good condition, renders it less liable to accident than heretofore; and the road is now in as good condition as any in the country. This judicious outlay will be continued until the road shall be complete in all its appointments.

In speaking of the Elmira Division the report says: "We believe the trade of the Northwest is sufficient at all times to make this road profitable, independent of the advantage it is to this company as a feeder, and the power which it gives us to attract trade to Baltimore, which would otherwise go to New York."

The following gentlemen, constituting the former Board, were elected Directors to serve during the ensuing year. All the shares of stock except 9,800 voted, and the election was unanimous. J. D. Cameron, Wistar Morris, Wm. Colder, J. D. Potts, A. E. Kapp, B. F. Newcomer, George Small, Jacob P. Jones, Thos. A. Scott, John M. Kennedy, E. C. Biddle, Henry Welsh.

The Board subsequently organized. J. D. Cameron, Esq., the present energetic President, was re-elected, together with Robert S. Hollins, Esq, as Secretary.

## GRAND RAPIDS RAILROAD.

We take from the *Kalamazoo Gazette*, the following act of the Michigan Legislature, confirming the grant of Lands made by a recent act of Congress to the Grand Rapids and Indiana Railroad Company. This road, our readers will recollect, is the Southern end of the Railroad from Fort Wayne, (Ind.) to Mackinaw,—through Amboy—Sturgis,—and Grand Rapids. We have always considered this one of the most important projected Railroads in the country, and have in the earlier pages of this Journal written several articles upon it. Part of the work between Grand Rapids and Indiana, has already been done in grading; but the work needs and will receive the benefit of the large land grant, made by Congress. We trust the work will now be begun and finished at an early day.

AN ACT.

To confer an additional grant of Public Lands upon the Grand Rapids and Indiana Railroad Company.

WHEREAS, by an Act of Congress approved June 3, 1856, a grant of Public Lands was conferred upon the State of Michigan, from Grand Rapids to some point on or near Traverse Bay. And

WHEREAS, Said grant of lands was enlarged and extended from Fort Wayne, in the State of Indiana, *viz* Sturgis township, to Grand Rapids, in the State of Michigan, by an Act of Congress approved June 7, 1864; and

WHEREAS, Said original grant was conferred upon the Grand Rapids and Indiana Railroad Company, by an Act of the State Legislature, approved February 14, 1857; and

WHEREAS, The above mentioned extension of said grant is made upon, and describes the line of road occupied by said Company.

THEREFORE, Section 1. The People of the State of Michigan enact, that said enlarged and extended grant of public lands be, and is hereby, conferred upon the Grand Rapids and Indiana Railroad Company, upon the same terms and under the same restrictions and regulations, as are prescribed in the Act of February 14, 1857. and all subsequent acts relating thereto, so far as they are now in force.

E. O. GROSVENER,
President of the Senate.

GILBERT E. READ,
Speaker of the House of Representatives.

Approved March 10. 1865.

HENRY H. CRAPO.

## MONETARY AND COMMERCIAL.

On this subject, we ask ourselves what can we say? The only proper answer to any question on this head is "all is afloat." So rapid have been the fluctuation in currency, and the price of commodities in the last two weeks,—that it is literally impossible to fix any certain condition of financial operations, whether present or future. The decline in gold has been quite as rapid in the past week, as in those immediately preceeding. In regard to prices,—the *Cincinnati Price Current* says;

"The decline in gold has kept the produce market, and indeed all the other markets, in a continued state of ferment, during the week, and business bas to a great extent been suspended. The decline in many articles has been startling, and must lead to serious embarrassments in all departments of trade. The question of supply and demand has ceased to be considered, but self-protection has been the ruling feature in the markets, and hence it is that prices have fluctuated violently, something like the surging of the waves of the ocean when lashed by the driving tempest. In this city there has been but little of this experienced, but in New York the daily changes in prices have been unprecedented. The changes in the price of a few articles in that market during the week compare as follows:

| | March 14— 1½ P. M. | March 21— 1½ P. M. |
|---|---|---|
| Gold..... | 181⅝ | 156½ |
| Coupon Sixes of 1881... | 110¾ | 100½ |
| Certificates..... | 98⅝ | 97 |
| 5-20s..... ..... | 109⅞ | 101½ |
| 10 40s..... | 97½ | 87½ |
| Cotton (middling)..... | 72 | 55 |

| | | |
|---|---|---|
| Petrolcum, in bond..... | 63 | 54 |
| Prime sugar..... | 17¾ | 15½ |
| Flour, R. H. O.....$11 | 00 | $10 55 |
| Corn ..... 1 | 75 | 1 60 |
| Oats..... 1 | 11 | 1 04 |
| Wheat..... 2 | 20 | 1 95 |
| Mess pork (oew).....34 | 12½ | 28 00 |
| Lard ..... | 22 | 18½ |
| Whisky..... 2 | 25 | 2 21 |

The *prices* of many articles have not fallen as much as might have heen anticipated, aod we think an effeet may be looked for in a few weeks diffcrent from what is generally expected. It is—that while gold may stand still, or even rise a little, that *the prices of articles of consumption will continue to fall.* The reason is obvious,—that they have not yet fallen anything in comparison with the fall of gold, or in other words, the appreciation of the currency, hut, to that standard all prices must come. Hencc we think, that unless gold rises very considerably, the prices of common articles of consumption must continue to fall. In regard to money, the *Price Current* justly says:

"The demand for money has fallen off largely, because that few now want it, except ing those who are in speculative difficulties, and they, not having the slightest chance of obtaining loans, do not ask for them. Others with comparatively few exceptions, do not want them, and therefore it is that the demand for money has fallen off and the supply of currency is increasing, and the market is easy at 10@12 per cent."

The price of gold has heen as follows:

| Date. | Opening. | Highest. | Lowest. | Closing. |
|---|---|---|---|---|
| March 16... | 175½ | 176¾ | 165¾ | 167¼ |
| " 17... | 167⅛ | 168⅛ | 163½ | 165½ |
| " 18..... | ..... | ..... | ..... | 155 |
| " 19... | 167 | 167 | 158½ | 159 |
| " 20... | 155 | 159⅞ | ..... | 156¼ |
| " 21... | 155 | 159 | 154½ | 156 |
| " 22... | 150 | ..... | ..... | 157⅛ |

One of the most remarkahle things connected with husiness, is the great freshets at the East, especially in Western New York.

There have been unprecedented freshets in New York and Pennsylvania, thc creeks and rivers heiug higher than ever before known, causing a stoppage of the mails and an interruption of telegraphic communication for three days, and an immense loss of property. All the towns in the Genessee Valley, New York, were suhmerged; hridges carried away and railways underminded. At Pittshurg the river rose 22 feet in thirty hours, and at this place the river has risen to 47 feet and was still raising, with heavy rains.

In Military matters all is favorable. The march of Sherman's army is steadily forward, and all signs indicate the speedy dissolution of the rehellion. No man now expects it to hold out very long.

---

Population of Italy.—The Italian Government has recently published the result of the first census taken since the annexation of the various provinces which now constitute Italy.

The kingdom of Italy contains a population of 21,777,334 inhahitants; it is, therefore, by the comparative number of its inhabitants the fifth power in Europe; superior to that of Spain, whose territory is twice as extensive, and also to that of Prussia, whose superficial extent is comparatively greater. Italy united would number 27,000,000 of inhabitants.

The average population of each parish, or rather commune, in Italy, is 2,821, while in France the average is only 978. In the former there are reckoned nine communes to 300 square kilometres. In the latter, on the contrary, there are only 18 in a space of equal extent.

Lombardy and Sicily are the provinces in which, during the last few years, the population has increased most rapidly; Sardinia and the Neapolitan provinces follow. In Piedmont the increase has been more tardy, the wars of 1849 and 1850 being in a great measure the causè of this phenomenon.

---

## STAMP DUTIES.

The following is an abridgment of the new Tax Law which goes into operation August 1, 1864:

AFFIDAVITS in suits or legal proceedings shall be exempt from stamp duty.

AGREEMENT or contract, &c.—for every sheet or piece of paper upon which either of the same shall be written ..... 5 cts.

BANK CHECK, draft or order—Drawn upon any bank, banker or trust company, or for any sum exceeding $10, drawn upon any other person or persons, companies or corporations, at sight or on demand ..... 2 cts.

BILL OF EXCHANGE (Inland)—for a sum not exceeding $100 ..... 5 cts.

For every addition $100, or fractional part thereof. 5 cts.

BILL OF EXCHANGE (Foreign) or Letter of Credit—drawn in but payable out of the United States, if drawn singly or otherwise than in sets, shall pay the same rates of duty as inland bills.

If drawn in sets of three or more: for every bill of each set, where the sum made payable shall not exceed $100 ..... 2 cts.

And for every additional $100 or fractional part thereof..... 2 cts.

BILL OF LADING or Receipt, for any merchandise or effects, to be exported from the United States to any foreign port..... 10 cts.

BILL OF SALE, by which any ship or vessel shall be conveyed to any other person, when the consideration shall not exceed $500..... 50 cts.

Exceeding $500 and not exceeding $1,000.....$1 00

Exceeding $1,000, for every additional amount of $500 or fractional part thereof..... 50 cts.

BOND—For indemnifying any person for the payment of any sum of money, when the money ultimately recoverable thereupon is $1,000 or less..... 50 cts.

When in excess of $1,000, for each $1,000 or fraction..... 50 cts.

Bond for due execution of duties of office.....$1 00

Bond of any description, other than such as may be required in legal proceedings, or used in connection with mortgage deeds, and not otherwise charged in this schedule..... 25 cts.

CERTIFICATE of stock in any incorporated company ..... 25 cts.

Certificate of profits, showing an interest in the property of any incorporated company, if for a sum not less than $10 and not exceeding $50..... 10 cts.

Exceeding $50 and not exceeding $1,000 ..... 25 cts.

Exceeding $1,000 for every additional $1,000 or fractional part thereof..... 25 cts.

Certificate.—Any certificate of damage or otherwise, issued by any port warden, marine surveyor, or other person acting as such..... 25 cts.

Certificate of deposit of any sum of money in any bank or trust company, or with any banker, if for a sum not exceeding $100 ..... 2 cts.

For a sum exceeding $100..... 5 cts.

Certificate of any other description than those specified..... 5 cts.

CHARTER-PARTY.—Contract or agreement for the charter of any ship or vessel, or steamer, between the captain, master, owner or agent, if the registered tonnage of such ship, or vessel, or steamer, does not exceed 150 tons..... $1 00

Exceeding 150 and not exceeding 300 tons..... $3 00

Exceeding 300 and not exceeding 600 tons..... $5 00

Exceeding 600 tons ..... $10 00

CONTRACT.—Broker's note, or memorandum of sale of merchandise, stocks, bonds, exchange, notes of hand, real estate or property of any kind, issued by brokers, each note or memorandum of sale..... 10 cts.

CONVEYANCE.—Deed, whereby any lands, tenements, or other realty sold, shall he granted, assigned, &c., when the consideration or value does not exceed $500..... 50 cts.

When the consideration exceeds $500, aod does not exceed $1,000 ..... $1 00

And for every additional $500, or fractional part thereof, in excess of $1,000..... 50 cts.

ENTRY of any goods, wares or merchandise at any Custom House, either for consumption or warehousing, not exceeding $100 in value ..... 25 cts.

Exceeding $100 and not exceeding $500 in value..50 cts.

Exceeding $500 in value..... $1 00

Entry for the withdrawal of any goods or merchandise from bonded warehouse ..... 50 cts.

GAUGERS' RETURNS, if for a quantity not exceeding 500 gallons gross..... 10 cts.

Exceeding 500 gallons gross..... 25 cts.

INSURANCE (Life). Policy of insurance, or other instrument whereby any insurance shall he made upon any life or lives; when the amount insured shall not exceed $1,000 ..... 25 cts.

Exceeding $100 and not exceeding $5,000..... 50 cts.

Exceeding $5,000..... $1 00

Insurance (Marine, Inland and Fire). Each policy of insurance, or other instrument, the premium upon which does not exceed $10..... 10 cts.

Exceeding $10 and not exceeding $50..... 25 cts.

Exceeding $50..... 50 cts.

LEASE, Agreement or Contract for the hire, use or rent of any land, tenement, or portion thereof, where the rent or rental value is $300 per annum or less ..... 50 cts.

Where the rent or rental value exceeds the sum of $300 per annum, for each additional $200 or fractional part thereof in excess of $300..... 50 cts.

MANIFEST for Custom House entry or clearance of the cargo of any ship, vessel or steamer for any oreign port: if the registered tonnage of such ship, vessel or steamer does not exceed three hundred tons..$1 00

Exceeding three hundred tons and not exceeding six hundred tons..... $3 00

Exceeding six hundred tons..... $5 00

MEASURERS' RETURNS, if for a quantity not exceeding 1,000 bushels..... 10 cts.

Exceeding 1,000 bushels ..... 25 cts.

MORTGAGE of lands, estate or property, real or personal, heritable or movable whatsoever, or any personal bond as security for the payment of any definite or certain sum of money exceeding $100 and not exceeding $500..... 50 cts.

Exceeding $500 and not exceeding $1,000..... $1 00

And for every additional $500 or fractional part thereof in excess of $1,000..... 50 cts.

*Provided*, That upon each and every assignment or transfer of a mortgage, lease, or policy of insurance, or the renewal or continuance of any agreement, contract or charter, hy letter or otherwise, a stamp duty shall he required and paid equal to that imposed on the original instrument.

PASSAGE TICKET by any vessel from a port in the United States to a foreign port, not exceeding $35..... 50 cts.

Exceeding $35 and not exceeding $50..... $1 00

And for every additional $50 or fractional part thereof in excess of $50..... $1 00

POWER OF ATTORNEY .. ..... 25 cts.

Power of Attorney or proxy for voting at any election for officers of any incorporated company.... 10 cts.

Power of Attorney to sell and convey real estate, or to rent or lease the same..... $1 00

PROBATE OF WILL, or Letters of Administration: where the estate and effects for and in respect of which such probate or letters of administration applied for shall be sworn or declared not to exceed the value of $2 000..... $1 00

Exceeding $2 000, for every additional $1,000 or fractional part thereof in excess of $2,000..... 50 cts.

PROTEST.—Upon the protest of every note, bill of exchange, acceptance, check or draft, or any marine protest..... 25 cts.

WAREHOUSE RECEIPTS for property, goods, wares or merchandise, not otherwise provided for in any public or private warehouse, when the property or goods so deposited or stored shall not exceed in value $500..... 10 cts.

Exceeding in value $500 and not exceeding $1,000.20 cts.

Exceeding in value $1,000, for every additional $1,000..... 10 cts.

RECEIPTS for the payment of any sum of moneys or debt due exceeding $20, not being for satisfaction of any mortgage or judgment or decree of court, and a receipt for the delivery of any property..... 2 cts.

WAREHOUSE RECEIPT lor any goods, merchandise, or property of any kind, not otherwise provided for, held on storage in any public or private warehouse or yard..... 25 cts.

WEIGHERS' RETURNS, if for a weight not exceeding five thousand pounds..... 10 cts.

Exceeding five thousand pounds..... 25 cts.

WRIT, or other original process by which any suit is commenced in any court of record..... 50 cts.

Where the amount claimed in a writ issued by a court not of record, is $100 or over..... 50 cts.

Upon every confession of judgmeut, cognovit, for $100 or over (except in those cases where the tax for the writ of a commencement of a suit has been paid.50 cts.

Writs or other prncess on appeals from justice courts or other courts of an inferior jurisdiction to a court of record..... 50 cts.

WARRANT OF DISTRESS, when the amount of rent claimed does not exceed $100..... 25 cts.

When the amount claimed exceeds $100 ..... 50 cts.

*Provided* That no writ, summons or other process issued by and returnable to a Justice of the Peace, except as hereinbefore provided, or by any police or municipal court having no larger jurisdiction as to the amount of damages it may render than a Justice of the Peace in the same State, or issued in any criminal or other suits commenced by the United States or any State, shall he subject to the payment of stamp duties; *and provided further*, that the stamp duties imposed hy the schedule B on manifests, hills of lading and passage tickets, shall not apply to steamboats or other vessels plying between ports of the United States and ports in British North America.

MEDICINES OR PREPARATIONS.

For and upon every packet, box, bottle, pot, phial or other inclosure, where such packet, box, bottle, pot, phial or other inclosure, with its contents, shall not exceed, at the retail price or value, the sum of 25 cents..... 1 ct.
Exceeding 25 and not exceeding 50 cents..... 2 cts
Exceeding 50 and not exceeding 75 cents..... 3 cts
Exceeding 75 cents and not exceeding $1..... 4 cts.
Where such packet, box bottle or other inclosure, with its contents, shall exceed the retail price of $1, for each and every 50 cents or fractional part thereof over and above the $1, an additional ..... 2 cts.

For and upon every packet, box, bottle or other inclosure, containing any essence, extract, toilet water, cosmetic, hair oil, pomade, hair dressing, hair restorative, hair dye, tooth wash, dentifrice, tooth paste, aromatic cachous, or any similar articles, by whatsoever name the same heretofore have been, now are, or hereafter be called, where such packet, box, bottle or other inclosure, with its contents, shall not exceed, at the retail price, the sum of 25 cents..... 1 ct
Exceeding 25 and not exceeding 50 cents..... 2 cts
Exceeding 50 and not exceeding 75 cents..... 4 cts
Exceeding 75 cents and not exceeding $1..... 3 cts.

Photographs, ambrotypes, daguerreotypes or any sun picture, except as hereinbefore provided—upon each and every picture of which the retail price shall not exceed 25 cents..... 2 cts.
Exceeding the retail price of 25 cents and not exceeding the sum of 50 cents..... 3 cts.
Exceeding the retail price of 50 cents and not exceeding $1..... 5 s
Exceeding the retail price of $1, for every additional dollar or fractional part thereof..... 5 cts.

Playing Cards—For and upon every pack, of whatever number, when the retail price per pack does not exceed 18 cents..... 2 cts.
Exceeding the retail price of 18 cents and not exceeding 25 cents per pack..... 4 cts.
Exceeding the retail price of 25 cents and not exceeding 50 cents per pack..... 10 cts.
Exceeding the retail price of 50 cents and not exceeding $1 per pack..... 15 cts.
Exceeding the retail price of $1, for every addition $150 cents or fractional part thereof, in excess of a..... 5 cts

Where such packet, box, bottle or other inclosure, with its contents, shall exceed the retail price of $1, for each and every 50 cents, or fractional part thereof, over and above the $1, additional..... 2 cts.
Friction or lucifer matches, for each parcel or package..... 1 ct.
When in parcels or packages containing more than one hundred and not less than two hundred matches, for each parcel or package..... 2 cts.
And for every additional one hundred matches or fractional part thereof..... 1 ct.

For all cigar lights and wax tapers—double the rates herein imposed upon friction or lucifer matches.

*Provided*, That the stamp duties herein provided for on friction or lucifer matches made in part of wood, or on cigar lights or wax tapers, shall not be imposed until Sept. 1, 1864; but until that time the tax shall be assessed and collected as heretofore; and on and after said Sept. 1 every package or parcel sold by any person, firm, company or corporation, shall be stamped as herein required.


**WRIGHTSON & CO.**

**BOOK & JOB PRINTERS,**

*167 Walnut St.*

CINCINNATI, OHIO.


## CHANGE OF TIME.

## Indianapolis and Cincinnati



THREE THROUGH TRAINS DAILY, as follows:

| | Leave. | Arrive. |
|---|---|---|
| St. Louis and Chicago Express..... | 6.20 A. M. | 10.15 A. M. |
| Springfield & St. Joseph Express ... | 1.10 P. M. | 5.00 P. M. |
| St. Louis & Chicago Express..... | 4.00 P. M. | 1.30 A. M |

Sleeping cars by this train for St. Louis and Chicago

ACCOMMODATION TRAINS.

| | Leave. | Arrive. |
|---|---|---|
| Lawrenceburg Accommodation..... | 4.25 P. M | 8.35 A. M. |
| Harrison..... | 9.00 A. M. | 3.00 P. M. |

Through Tickets can be obtained at the Spencer House, Burnet House and Gibson House Offices, and at the Depot.

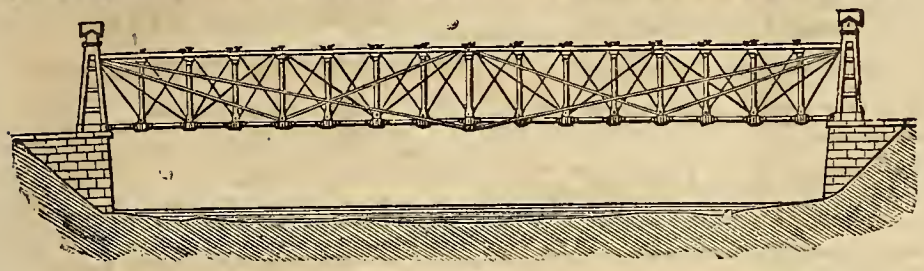
☞ Passenger Depot corner of Pearl and John streets, within a few squares of all the principal Hotels in the city.

ROBERT MEEK, Supt.

# General Ticket Agents of the Principal Railroads.

Atlantic & Great Western Railway.....T. H. Goodman, General Ticket Agent, Meadville, a,
Buffalo & Erie .....J. A. Burch, General Ticket Agent, Buffalo, N. Y.
Buffalo, New York & Erie.....Wm L. Doyle " " " Buffalo, N. Y.
Buffalo & Lake Huron.....Thos. W. Bussell, " " " Brantford, C. W.
Burlington & Missouri River Railway..L. Carper, " " " Burlington, Iowa,
Boston & Worcester.....L. K. Miles, " " " Boston, Mass.
Bellefontaine Railway Line.....Chas. Wood, Gen. Ticket Agent, Terre Haute, Ind'
Boston & Providence.....James Dailey, Ticket Agent, Boston, Mass.
Baltimore & Ohio .....L. M Cole " Baltimore, Md.
Bost. Concord & Mont. and Wh. M .. J. L. Rogers, " Plymouth, N H.
Chicago, Mil.. LaCrosse & St. Paul.....A. V. H. Carpenter, Gen Ticket Agent, Milwaukee Wis,
Chicago, Burlington & Quincy.....Samuel Powell, General Ticket Agent. Chicago, Ill.
Chicago & R. Island and Miss. & Mo...W. L. St. John, " " " Chicago, Ill.
Chicago, Alton & St. Louis.....Joseph Price, Treasurer, Chicago, Ill.
Chicago & North Western.....E. P. Cutler, General Ticket Agent, Chicago, Ill.
Connecticut & Passumpsic Rivers....Nathaniel P. Lovering, " " " St. Johnsbury, Vt.
Chicago, Iowa & Nebraska.....Jas. M. Ham, General Passenger Agent. Clinton, Iowa,
Central Railway of New Jersey.....H. P Baldwin, General Ticket Agent, 69 Wall Street, N. Y.
Catawissa Railway Co.....H. H. McConnell. Freight and Passenger Accountant, Philadelphia, Pa.
Central Ohio.....John W. Brown, General Ticket Agent. Columbus, Ohio.
Columbus & Indianapolis R R.....F. Chandler, " " " Indianapolis, Ind.
Cincinnati, & Zanesville.....E. S. Lowe. " " " Cincinnati "
Cincinnati & Chicago Air-Line..... L. H Walkley, " " " Richmond. Ind
Cheshire.....R. Stewart, " " " Keene. N. H.
Connecticut River Railway .....E. Morgan " " " Springfield, Mass.
Cleveland, Painesville & Ashtabula....J. W. Cary, " " " Cleveland, Ohio.
Cleveland & Pittsburg.....F R. Myers, " " " " "
Cleveland & Toledo.....John U. Parsons, " " " " "
Cleveland, Columbus & Cincinnati....H. C. Marshall, " " " " "
Cincinnati, Hamilton & Dayton..... .P. W. Strader, " " " Cincinnati, "
Concord, Manchester & Lawrence.....Geo. G. Sanborn, " " " Concord N. H.
Dayton & Michigan.....P. W. Strader, " " " Cincinnati, Ohio
Dubuque, & South-Western.....Geo. W. Farley, Receiver, Dubuque, Iowa.
Dubuque & Sioux City.....J. A. Pinto, General Ticket Agent. Dubuque, Iowa.
Detroit & Milwaukee.....Jas. H. Muir, Auditor, Detroit, Mich.
Erie Railway.....Wm. R. Barr General Passenger Agent. New York.
Eaton & Hamilton.....E. W. McGuire, General Ticket Agent. Eaton, Ohio
Evansville & Crawfordsville.....J. E. Martin, Secretary, Evansville, Ind.
Elmira & Williamsport.....Edmund B Smith, General Ticket Agent. Elmira, N. Y
East Pennsylvania.....Philip M. Ermentrout, " " " Reading, Pa.
Erie & Pittsburg.....J A Burch, " " " Buffalo, N. Y.
Fitchburg Railway.....H F. Whitcomb, " " " Boston, Mass.
Great Central Railway Line.....F. Chandler, General Ticket Agent, Indianapolis, Ind.
Great Western Railway (Canada).....J. Charlton, Auditor, Hamilton, C. W.
Great Western Railway Co of 1859.....W. D Richardson, General Ticket Agent, Springfield, Ill
Grand Trunk Railway (Canada).....Henry Shackell, Auditor, Montreal. C. E
Hudson River Railway.....C. H. Kendrick, General Ticket Agent, New York.
Hannibal & St. Joseph.....P. B. Groat. " " " Hannibal, Mo.
Indianapolis & Cincinnati.....F. B. Lord, " " " Indianapolis, Ind.
Indianapolis, Peru & Chicago.....V. T. Malott, Treasurer, Indianapolis, Ind.
Illinois Central.....Wm. P. Johnson, General Passenger Agent, Chicago, Ill.
Indiana Central.....F. Chandler, General Ticket Agent, Indianapolis, Ind.
Jeffersonville.....Jas. Ferrier " " " Jeffersonville, Ind.
Kentucky Central,.....H. P. Ransom, General Ticket Agent, Covington Ky.
Keokuk, Ft. Des Moines & Minn..... John Givin, " " " Keokuk, Iowa.
Little Miami and Columbus & Xenia..P. W. Strader " " " Cincinnati, Ohio.
Logansport, Peoria & Burlington.....E. M. Whitlock, Chief Clerk, Peoria, Ill.
La Crosse & Milwaukee.....J M. Kimball, General Ticket Agent, Milwaukee, Wis.
Louisv. & Frankfort and Lex. & F....Henry Steffee, General Freight and Ticket Agent, Louisville, K
Lafayette & Indianapolis.....John M Kerper, Geoeral Ticket Agent, Lafayette, Ind.
Louisville, New Albany & Chicago....I. G. Williamson, " " " New Albany, Ind
Louisville & Nashville .....D. A. Kean, Chief Clerk, Louisville, Ky.
Michigan Central.....Thos. Frazer, General Ticket Agent, Detroit, Mich.
Mich. Southern & Northern Indiana..C. P. Leland, " " " Toledo, Ohio.
Milwaukee & Prairie du Chien.....E. P. Bacon, " " " " "
Milwaukee & St. Paul,.....F. W. Spear, General Ticket Agent. Milwaukee, Wis.
Marietta & Cincinnati.....Chas. F. Low, General Ticket Agent, Chillicothe. Ohio.
Montreal & Champlain.....J. F. Barnard, " " " Montreal, C. E.
New York Central .....E. F. Folger, Chief Clerk. Albany, New York.
New York, Harlem & Albany..... ....R. R. Freeman, General Ticket Agent, New York.
Norwich & Worcester.....Edward T. Clapp, Secretary, Norwich. Conn.
Northern Central.....Edward S. Young, General Ticket Agent, Baltimore. Md.
New York & New Haven.....Jacob Mendel, " " " New York.
New Haven & Northampton.....E. A. Ray, Superintendent and Clerk, Westfield, M
North Missouri.....Jas. H. Concannon, General Ticket Agent, St. Louis, Mo.
Northern (N. H.).....A. C. Warren, " " " Concord, N, H.
N. Haven, N. London & Stonington....Wm. T. Bartlett. " " " New Haven. Conn.
North Pennsylvania .....Ellis Clark. " " " Philadelphia. Pa
Northern New York.....Marshall Conant, " " " Malone, N. Y.
Ohio & Mississippi.....Chas. E. Follett, " " " Cincinnati, Ohie.
Philadelphia & Reading.....John Welch, General Ticket Agent, Philadelphia, Pa.
Pennsylvania Railroad.....H W. Gwinner, " " " " "
Pittsburg, Columbus & Cincinnati.....Ira A. Hutchinson, General Ticket Agent, Columbus, Ohio
Pittsburg, Fort Wayne & Chicago.....H. R. Payson " " " Pittsburg, Pa.
Pacific Railway of Missouri.....E. W. Wallace. General Ticket Agent, St. Louis, Mo.
Philadelphia, Wilmington & Balt.....Geo. A. Dadmun, " " " Philadelphia, Pa.
People's Line of Steamers (N. Y. .....John C. Hewitt, " " " New York.
Providence & Worcester.....Wm. M. Durfee, " " " Providence, R. I.
Portland, Saco & Portsmouth.....Eliphalet Nott, Treasurer, Portland. Me,
Quincy & Toledo.....W. D. Richardson. General Ticket Agent, Springfield. Ill.
Racine & Mississippi.....R. G. Tate, " " " Racine, Wis,
Rutland & Washington.....John McKeogh, " " " Rutland, Vt.
Rutland & Burlington.....Wm. A. Burnett " " " " "
Rome, Watertown & Ogdensburg.....H. T. Frary, " " " Watertown, N. Y.
Rensselaer & Saratoga.....G. N. Crandall, " " " Troy. N. Y.
Sandusky, Dayton & Cincinnati.....J. M. Webster, " " " Sandusky, Ohio.
Sandusky, Mansfield & Newark.....H. M. Bronson, " " " " "
Saratoga & Whitehall.....J. H. Sternbergh, " " " Sarotoga Springs N
The United States Mail Line Co.....Thos. Sherlock, Treasurer, Cincinnati, Ohio.
Terre Haute, Alton & St. Louis.....Jas. B Ralston, General Ticket Agent, St. Louis, Mo.
Terre Haute & Richmond.....Chas. Wood, Secretary, Terre Haute, Ind.
Troy & Boston .....C. W. Moseley, General Ticket Agent, Troy, N. Y.
Toledo & Wabash.....J. E. Carpenter, Cashier. Toledo, Ohio.
Vt. & Can., Vt. Central, and Sullivan. H. H. Locklin, General Ticket Agent, St. Albans, Vt.
Western (Mass.) Railway.....M. Griggs, " " " Springfield, Mass
Worcester Nashua.....M. Witter, " " " Worcester, Mass.

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '63. 1y. Letter Box, 1393. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27.1y

---

WRIGLEY & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines. 419 y t

---

## KNOX & SHAIN,

**Engineering and Telegraphic**

INSTRUMENT MAKERS,

**PHILADELPHIA**

---

## JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4. 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

Manner, at the Shortest, and on the

**Most Reasonable Terms.**

---

## Manufacturers, Importers & Dealers

—IN—

**RAILROAD, CAR,**

—AND—

**MACHINE SHOP**

**SUPPLIES,**

—AND—

**MACHINERY OF EVERY DESCRIPTION**

**47 West Front Street, Cincinnati.**

PERKIN LIVINGSTON & POST

---

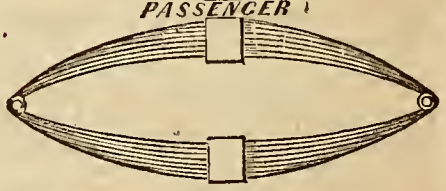
## RAILWAY SPRINGS.

**FREIGHT**

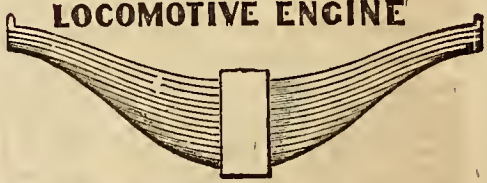




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS,**

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, an one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST;

**No. 47 West Front St., CINCINNATI, O.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

**SPEED, SECURITY AND COMFORT.**

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY

W. P. SMITH. *Master Transportation, Baltimor*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M COLE. *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St. Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at.... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run hy me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M llstreet

C. E FOLLETT, General Ticke Agent.

W D. GRISWOLD, General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis. at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra. St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtaine at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

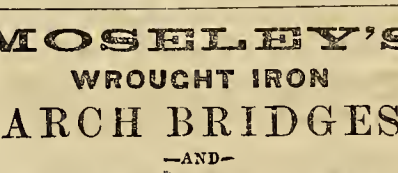
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

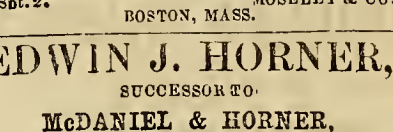
Spt. 2. MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn'a

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

THE SCHENECTADY

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches nutside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—2½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!!



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M. (Express.

On Sundays, 10.24 P M.

☞Through connections made for all points East and Wes

WM. TEARNS Supt.

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, MARCH 30, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Cincinnati Express | 6.00 A. M. | 7.30 P. M. |
| Mail | 9.00 A. M. | 8.15 A. M |
| Columbus Accommodation | 4 00 P. M. | 11.30 A. M. |
| Morrow Accommodation | 6.20 P. M. | 8.00 A. M. |
| Night Express | 10.00 P. M. | 10.05 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky Mail | 7.00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7.00 A. M. | 9.45 P. M. |
| Cin. & Chicago Air Line Express | 7.00 A. M. | 9.45 P. M. |
| Dayton Accommodation | 2.20 P. M. | 5.45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5.00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7.00 P. M. | 12.35 P. M. |
| Hamilton Accommodation | 7.00 P. M. | 8.05 A. M. |
| do do | 10.00 A. M. | 6.45 A. M. |
| *Marietta & Cincinnati—* | | |
| Mail Express | 7.40 A. M. | 7 00 P. M. |
| Chillicothe Accommodation | 3.30 P. M. | 11.30 A. M. |
| *Ohio & Mississippi—* | | |
| Louisville, St. Louis and Cairo Mail | 7.00 A. M. | 11.30 P M. |
| St. Louis and Cairo Express | 6.00 P. M. | 5.00 A. M. |
| Louisville, St. Louis and Cairo Express | 7 40 P. M. | 8.20 A. M. |
| *Indianapolis & Cincinnati—* | | |
| St. Louis and Chicago Express | 6.30 A. M. | 11.00 A. M. |
| Mail | 1.00 P. M. | 5.00 P. M. |
| Night Express | 4.00 P. M. | 1.30 A. M. |
| Lawrenceburg Accommodation | 4.25 P. M. | 8.35 A. M. |
| Harrison Accommodation | 9.00 A. M. | 3.00 P. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Morning Express | 9 00 A. M. | 7.30 P. M. |
| Accommodation | 4.00 P. M. | 8.05 A. M. |
| *Kentucky Central,—* (City time.) | | |
| First Train | 6.00 A. M. | 10.40 A. M. |
| Second Train | 2.00 P. M. | 6 00 P. M |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## THE PROGRESS OF THE COUNTRY.

WHERE SHALL WE BE AT THE END OF THE WAR.

The *Stockholder*, (N. Y.) has some interesting articles on National Unity, to which we propose to add something.—illustrating our advance in physical and commercial progress. There is a very natural idea among many persons, that the losses and drawbacks of the War have not only impeded its progress; but will long act as a burden upon it. That there have been great losses in the war, of life and labor; and that there is a large amount of National Debt to be paid off is indisputable; but, that the progress of the Nation is in any serious degree impaired, is a great mistake. The Commissioner of Statistics for Ohio has shown, by actual facts,—thus on the basis of Ohio being (as it is) one tenth part of the loyal States,—that they have 300,000 able bodied men, more than they had in 1860. This represents 1,500,000 persons. To this must be added 800,000 immigrants, making the actual population of the loyal States (in 1860, they had 22,500,000)—2,300,000 in January 1865, more than they were in July 1860; that is 10 per cent. in four years and a half, notwithstanding, the losses of the war. The disloyal population was about half that of the loyal; and although the losses in the South have been the largest in proportion, and no immigration,—we must still allow some increase, from one-fourth to one-third that of the loyal States. Thus, we have in round numbers, about 3,000,000 of persons added to the population of the country, since 1860. This is something less than the ordinary increase in times of peace, but, not near so great a diminution as most persons suppose.

The *Stockholder*, says:

"The population of the United States, which was 2,803,000 inhabitants in 1775, including 500,000 slaves, amounted to 31,445,080 in 1860, as shown by the last census, and the rate of increase has been as follows since the beginniug of the present century:

| | Increase | Per cent. |
|---|---|---|
| 1800 | 5,305,937 | 35.02 |
| 1810 | 7,239,814 | 36 45 |
| 1820 | 9.638,191 | 33.13 |
| 1830 | 12,866,020 | 33 49 |
| 1840 | 17.069,453 | 32.67 |
| 1850 | 23,191,876 | 35.87 |
| 1860 | 31,445,080 | 35.59 |

At this hour, in spite of the drain on our population in consequence of the war, it may be safely estimated at 35,000,000, and the United States will contain 40,000,000 of freemen when the term of office of President Lincoln will have ended."

The 3 000,000,—we have above shown to be added since 1860,—makes the population of December 1864, 34,445,080,—and at the present time very near the estimate of the *Stockholder*. The ratio of increasc, in the twenty years previous would give at this time 36,000,000. But, this calculation shows, that the war has reduced the progress of population to the extent of 1,000,000,—which we think is fully enough. Supposing the year 1866 to be the full and complete end of the war, (and it will probahly be much sooner than that,)—we shall commence the new era of peace with probably a much larger immigration from Europe than we have ever had. There will be no dread of war;—no obstacles to settlement in any part of the country; and the rich mines, and cheap lands will be more than ever a temptation. From 1865 to 1870,—the population of this country will probably increase at the rate of 36 per cent. decenially, which was the rate of increase from 1800 to 1810. This will give 41,000,000, of people in 1870. This gives to the country the labor of 10,000,000 of people on an average more from 1865 to 1870, than there were from 1855 to 1860. The latter was a period of extraordinary activity and commercial prosperity;—and we can now see, with this new basis of labor, skill and enterprise, what extraordinary progress in the physical arts, commerce, industry and production may be expected on the return of peace. No country of Europe will in 1870 have an equal population with the United States, except Russia; and there can be no doubt, that 40,000,000 of people in the United States are more efficient and productive, than 70,000,000 in Russia—with their barren territory and cold climate, scattered over such an immense extent.

In regard to internal communication, the *Stockholder* justly says:

"The United States possess to-day 32,871 miles of railroads, which have cost $1,234,262,610, or an average per mile of $37,549, while England and Ireland have but 11,386 miles, and France a little over 9,000; the total length of European railroads being not quite 38,000 miles. We have canals which have cost nearly $200,000,000, and our telegraph-lines extend a distance of 90,000 miles."

We have but little less amount of Railroad than all Europe; but Europe has in round numbers 250,000,000 of people, or about *eight times* as many, as we have. Great Britain and France, the most commercial nations of Europe have 20,000 miles of Railroad, and 65,000,000 of people; which is a mile of Railroad to 3,250 people. The United State have 32,000 miles of Road to 34,000,000 of people; or a mile of Railroad to 1,060 people. This proves clearly, that there is a great deal more locomotion and internal commerce it this country, than any part of Europe. There is no country where persons are in so much movement, and none where products are carried so far with so much rapidity. But, great as this is, the return of Peace will make it much greater. For population and business are increasing on the Pacific Coast, with rapidity the world has never seen. This makes it a *positive necessity*, that the great Railroad lines, between the Atlantic and Pacific should be completed, as soon as possible. It is a necessity which cannot be got round, and whose demands cannot be delayed. We have two motives to complete the Pacific Railroad and branches, which are immediate

and pressing. 1st. The rapid increase of population in the Pacific States renders it important, that there should be a direct Railroad communication, in order to bind them to the other States 2d. The increasing products of the mines, and the consequent stream of immigration, which goes to the Mining States, make a direct and rapid connection necessary, in order to secure the products and the wealth, which are there increasing at such a rapid rate. Indeed the motives for the immediate completion of the Pacific Road are so strong and pressing, as to be obvious to all intelligent minds. The work has doubtless been delayed by the war, but in the meantime the resources for it have been accumulating. We give below some tables of population and mining which will give some insight into what is going on in the Pacific States and Territories.

*Population of the Pacific Territories.*

| | In 1850. | In 1860. | In 1865. |
|---|---|---|---|
| California | 92,597 | 365,439 | 450,000 |
| Nevada | ..... | 6,857 | 100,000 |
| Idaho | ..... | ..... | 40,000 |
| Montana | ..... | ..... | 20,000 |
| Washington | ..... | 11,168 | 50,000 |
| Oregon | 13,294 | 52,463 | 100,000 |
| Total | 105,891 | 435,927 | 760,000 |

The last is an estimate, based on the latest information, and is probably below the truth. Idaho and Montano, belong properly to the Pacific States, and their commercial intercoorse must be with them. In 1870 the population of these States (for they will probably all be States then,) can not be much if any under 1,200,000 people, and this is a period close at hand,—the States of the Pacific will begin to count by millions, and soon a new empire will be there. Shall it belong to this Union? Every true American answers—yes! But if so, we must have a continued social, political and commercial intercourse.

Let us look at the products of precious metals, on the Pacific Coast. The *London Economist* estimates the total product of gold, *from the Islands and coasts of the Pacific*, in the fifteen years, from 1849 to 1863 inclusive, to be $1,750,000,000, (seventeen hundred and fifty millions,) of dollars. This is an average of $116.500,000, per annum. This includes Australia and Lower California. But the average of all outside the United States, will not exceed $50,000,000 per annum. So that the United States, according to the *Economist*, has been producing at the rate of $66,000,000 a year. We suppose that the quantities of Gold and Silver, now produced within the limits of this country must, in the present year, be considerably advanced on that. The data furnished, by the reports of Government lead to the following conclusion

| | |
|---|---|
| Product of California | $45,000,000: |
| Product of Nevada | 10,000,000 |
| Product of Oregon & Washington | 5,000,000 |
| Product of Idaho and Montano | 15,000,000 |
| Product of Colorado, and New Mexico | 5,000,000 |
| Aggregate | $80,000,000 |

We can not believe, that the whole production will be any less than this, and there is reason to believe, it will be much greater. We find, then, that the productiveness of the mines, and that of a kind, which enters so intricately into the commerce of the country, is such, that we must keep an intimate commerce with those producing countries, to maintain our commercial stability. For these reasons, which might be elaborated to a great extent, the Pacific Railroads must be taken in hand on the return of Peace, and they will no doubt be completed, with all the energy and speed characteristic of our country. These Roads and those west of the Mississippi will require 10,000 miles of additional Road, and we have no doubt, the next ten years will be a period of extraordinary Railroad activity.

We have spoken here of this particular branch of progress, because connected with our journal; but, there are other elements of progress of prodigious power, which will work with renewed activity on the return of Peace. The production of the country has no doubt been relatively diminished by the great number of men employed in the army. But, at the end of the War, 700,000 laborers will at once be re-employed in the industrial persuits of production. This at average wages is $700,000 per day for 300 days; and equal to $210,000,000, (two hundred and ten millions of dollars,) per year. In ten years. this will amount to over *two thousand millions of dollars*, without taking anything from our present production, and with no more than our present taxes, we can pay the whole National Debt, by the return of the Soldiers of the army to the ordinary labors of life.

We present these general views to those who are inquiring of the future. What will the end be? What will happen at the return of peace? How can we pay our National Debt? Whether do we tend? Our convictions upon this matter are clear and strong. We believe, that the return of peace will introduce this country to a period of extraordinary prosperity. Industry, Commerce, Mining, Manufactures, agriculture, will all be in unprecedented activity. If our country, in its earlier stages has manifested a vigor of growth, and production never before known, still more will it do so, when new elements of invention, discovery and production are introduced into the general movement; and all impeding elements, such as slavery and disunion, shall be taken away.

---

☞ The Black Hills of Dakota have recently become an object of interest. A Detroit paper says:

There has long been an impression that these hills, which have been heretofore jealously guarded by the Indians, contain most valuable mineral wealth as well as timber, which in Dakota is even more valuable, and now that the Sioux war is declared ended, it is supposed that no obstacle will be offered to their thorough exploration.

## STEAMERS IN THE MAIL SERVICE.

RAILROADS AND STEAMBOATS.

It would be a curious thing, if such a thing were possible, to compare the progress of the Mails, under the old stage and horse system, and that now under the steam system. It is true still, that thousands of small Post-Offices in the country have to be reached by horse power; but, then the carriage by horses is but a small distance. Over all main lines the mail is carried by steam. And, here we remark, that the Government has not yet come up to its full duty in regard to the use of Railroads. That is, the Government has not yet equalled the Express Companies, in the expedition of carriage. It is well known, that the Daily Newspapers of great cities are transmitted one day earlier by Express Companies than by the Mail. Not only this, but frequently this must be the case with letters. Now, it is not of great importance whether a newspaper gets along a day sooner or not; but it is of some importance that the Government should not be outdone, in energy, by. private companies,—when the Government is in full possession of all the power and means necessary to speed. The fact is the Express Companies keep their bags and messengers open for packages until the last moment, and the Post-Office does not. Now, the Post Office of any great city ought to keep its bags open and its Clerks active,—till the last minute at which the mail must depart. The Government can have this done, just as well as a Company, and ought to do it, if only to show that the Government has as much vigor as individuals. It ought not to be said that Express Companies accomplish more than the Government could do.

The Post-Master General Reports the following amount of Railroad distance, in use by the Government of the United States on the 30th of June, 1864.

| | Miles | No. Roads. |
|---|---|---|
| Maine | 549¾ | 8 |
| N. Hampshire | 411½ | 11 |
| Vermont | 506 | 7 |
| Massachusetts | 1,326 | 30 |
| R. Island | 123 | 3 |
| Connecticut | 756 | 10 |
| New York | 3,059½ | 28 |
| New Jersey | 649½ | 12 |
| Pennsylvania | 2,211 | 34 |
| Delaware | 112½ | 2 |
| Maryland | 830 | 5 |
| Ohio | 3,424¾ | 28 |
| Michigan | 992 | 6 |
| Indiana | 1.748½ | 16 |
| Illinois | 2,882½ | 18 |
| Wisconsin | 1,101 | 8 |
| Iowa | 701 | 7 |
| Missouri | 803 | 5 |
| Kentucky | 471 | 5 |
| California | 23 | 1 |
| 20 States. Total | 22,649 | 234 |

This shows wonderful progress in the Rail road line. It will be observed, that of the whole number of miles of Railroad employed 12,124 miles,—much more than half the whole quantity,—is in the Central West; in the eight

States of Ohio, Indiana, Illinois, Michigan, Wisconsin, Iowa, Kentucky and Missouri. None of these States, except Ohio, Indiana and Illinois have more than a third of the miles of Road, they will have. A very few years will elapse, when these eight States alone will have twenty thousand miles of Railroad, and in all probability, they will be the most profitable roads of the United States,—because in the most producing country and in the one, which is most traversed by lines of commerce.

The Steamboat transportation of Mails will be very much increased, at the end of the War. Many rivers in the South which are now partially closed will be open to free navigation, and the transportation of the mails. So the general commerce with the Pacific will be rapidly and greatly increased; and from the Pacific States to the Asiatic countries—demanding a greatly extended mail intercourse, not only with parts of our own country; but with the Sandwich Islands, —with China,—and Siam—Japan, and Russian Asia. Indeed, we are likely to have soon an Asiatic commerce, which will exceed anything ever known, between Europe and Asia, or America and Asia. The trade of the world will soon change its channels, and there is, therefore, an immediate pressing demand for the Pacific Railroad. If the companies vested with the Charters have the means to go on with their work, they should push it vigorously. If not, they and the people should call upon the Government, for efficient help. There is no commercial need, we shall have in the next ten years, so great, as that of the Pacific Railroad.

☞ The following is extracted from a San Francisco correspondence:

Speaking of mining reminds me that we are just beginning to catch the petroleum infection here, which has nearly run crazy every body in the East. Petroleum lands are very abundant here, especially in the southern portion of the State. A gentleman in this city, who is a resident of San Bernardino County, possesses a body of land in San Bernardino County, on which there are eight oil-springs. A party of New-York speculators are negotiating for the land, and have already offered its owner $800,000 in greenbacks for it. The excitement is just commencing here; many persons talk of petroleum, and San Francisco capitalists are sending men out in all directions to buy up oil-lands. Discriminating observers predict that we will have a petroleum excitement that will throw Frazer River, Boise, Idaho, Washoe, and Reese River excitement far into the shade. Of an oil-land recently sold to a person in this city for $23,000, the half was resold for $50,000, and that half was again sold for $100,000, and I have since heard that it has been organized into a joint stock company upon a basis which makes that half interest represent $400,000.

—The Racine and Mississippi Railroad receipts for the week ending March 7, were $7,446 04.

## RAILROAD ACCIDENTS IN PENNSYLVANIA.

A good deal has recently been said on the subject of Railroad accidents, and an act has passed one branch of the Legislature of Ohio, in reference to this subject. We present, for the information of those inquiring on this subject, the following table of all the killed and injured in Pennsylvania, from Railroad accidentss. It is taken from the Annual Report of the Auditor General of Pennsylvania It appears, that of 711 persons injured only 126 were passengers; that is 18 per cent nearly one half were employees. It will be found when the experiment is tried, that Legislation will do very little to prevent accidents.

| | PASSENGERS. | | TOTAL | |
|---|---|---|---|---|
| | Killed. | Injur'd. | Killed. | Injur'd. |
| Atlantic & Great Western | 1 | | 9 | 4 |
| Allegheny Valley | 1 | ... | 3 | ... |
| Cleveland, Painesville and Ashtabula | 7 | 5 | 12 | 8 |
| Catawissa | ... | | 3 | 2 |
| Catasauqua and Fogelsville | ... | | ... | 1 |
| Delaware, Lackawanna and Western | ... | | 15 | 4 |
| Delaware & Hudson canal and railroad | 1 | | 1 | 5 |
| East Pennsylvania | ... | | 2 | 3 |
| Erie and North-East | ... | | ... | 1 |
| Elmira and Williamsport | ... | | 3 | ... |
| Erie and Pittsburg | ... | | 3 | ... |
| Huntingdon and Broad Top Mountain | 1 | ... | 3 | ... |
| Ironton | ... | | 1 | 1 |
| Lehigh and Susquehanna | ... | | 2 | ... |
| Little Saw Mill Run | ... | | 1 | ... |
| Lehigh Valley | ... | | 12 | 4 |
| Lykens Valley & coal company | ... | | 1 | ... |
| Lackawanna and Bloomsburg | ... | | 4 | 2 |
| Northern Central | 6 | 6 | 18 | 27 |
| North Pennsylvania | ... | | 2 | 3 |
| New Castle and Beaver Valley | ... | | 4 | ... |
| Pittsburg, Fort Wayne and Chicago | 2 | 7 | 37 | 32 |
| Pittsburg and Connellsville | 1 | ... | 6 | 1 |
| Philadelphia and Reading | ... | | 24 | 28 |
| Philadelphia and Erie | 6 | | 10 | 16 |
| Philadelphia, Wilmington & Baltimore | 13 | 7 | 23 | 11 |
| Philadelphia and Trenton | ... | | 5 | 5 |
| Philadelphia, Germantown and Norristown | 1 | | 2 | 3 |
| Pennsylvania | 14 | 47 | 119 | 218 |
| Reading and Columbia | ... | | 1 | 2 |
| Schuylkill and Susquehanna | ... | | ... | 2 |
| Shamokin Valley & Poitsville | ... | | 1 | 3 |
| Tioga | 1 | | 1 | ... |
| West Chester and Philadelphia | ... | | 1 | ... |
| | 45 | 81 | 325 | 386 |

—The car works of the Racine and Mississippi Railroad, at Racine employs 175 men and made four passenger coaches and sixty box cars last year. The road has 19 locomotives, 12 passenger coaches, 324 box cars, 44 platform cars, 7 baggage cars and two mail and express cars.

## THE NEW TARIFF.

We publish below an official and certified copy of the new Tariff Act, which goes into effect on April 1st, and in relation to which the Secretary of the Treasury, (Hon. Hugh McCulloch) has issued the following explanatory circular:—

TREASURY DEPARTMENT, March 11, 1865.

SIR:—I transmit herewith an Act, amendatory of certain acts imposing duties on imports, approved March 3, 1865.

The second provision in section 4 of this Act does not repeal the 4th section of 'the Act to modify existing laws imposing duties on imports, and for other purposes," approved March 4, 1863. Vessels trading "to or from any part or place south of Mexico, down to, and including Aspinwall and Panama," will pay the tonnage duty of thirty cents per ton, only once a year.

The 9th section enacts "that this act shall take effect on and after the first day of April, eighteen hundred and sixty-five;" consequently in the absence of any provision of law to the contrary, you will cause the rates of duty imposed by this Act to be assessed only on such goods, wares, and merchandise as may be imported on or after the 1st proximo. Goods imported prior to the 1st proximo, whether under bond or otherwise, are not liable to the increased rates imposed by this Act.

Applications for relief under the 13th section of this Act must be made in the manner prescribed by Articles 524, 525, 526, 527, 528, 529, and 530, of the General Regulations, as that section extends the relief provided by the 8th section of the Act of March 28, 1854, to the cases specified in said 13th section.

I am very respectfully,

HUGH McCULLOCH,
Secretary of the Treasury.

[OFFICIAL]

## LAWS OF THE UNITED STATES.

*Passed at the Second Session of the Thirty-Eight Congress.*

AN ACT amendatory of certain acts imposing duties upon foreign importations.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress Assembled*, That section six of an act entitled "An act to increase the duties on imports and for other purposes," approved June thirty, eighteen hundred and sixty-four, be amended so that paragraph second, third and fourth of section six of said act shall be read as follows:

Second—On all manufactures of cotton, (except jeans, denims, drillings, bed tickings, ginghams, plaids, cottonades, pantalnons stuff, and goods of like description,) not bleached, colored, stained, painted or printed, and not exceeding one hundred threads to the square inch, counting the warp and filling, and exceeding in weight five ounces per square yard, five cents per square yard; if bleached, five cents and a half per square yard; if colored, stained, painted or printed, five cents and a half per square yard, and, in addition thereto, ten per centum ad valorem. On finer and lighter goods of like description, not exceeding two hundred threads to the square inch, counting the warp and filling, unbleached, five cents per square yard; if bleached, five and half cents per square yard; if colored, stained, painted or printed, five and a half cents per square yard, and, in addition thereto, twenty per centum ad valorem. On goods of like description, exceeding two hundred threads to the square inch, counting the warp

and filling, unbleached, five cents per square yard; if bleached, five and a half cents per square yard; if colored, stained, painted or printed, five and a half cents per square yard, and, in addition thereto, twenty per centum ad valorem.

Third—On all cotton jeans, denims, drillings, bed tickings, ginghams, plaids, cottonades, pantaloon stuffs, and goods of like description, or for similar use, if unbleached, and not exceeding one hundred threads to the square inch, counting the warp and filling, and exceeding five ounces to the square yard, six cents per square yard; if bleached, six cents and a half per square yard; if colored, stained, painted or printed, six cents and a half per square yard, and, in addition thereto, ten per centum ad valorem. On finer or lighter goods of like description, not exceeding two hundred threads to the square inch, counting the wool and filling, six cents per square yard; if bleached, six and a half cents per square yard; if colored, stained, painted or printed, six and a half cents per square yard, and, in addition thereto, fifteen per centum ad valorem. On goods of lighter description, exceeding two hundred threads to the square inch, counting the warp and filling, if unbleached, seven cents per square yard; if bleached, seven and a half cents per square yard; if colored, stained, painted or printed, seven and a half cents per square yard, and, in addition thereto, fifteen per centum ad valorem. PROVIDED, That upon all plain woven cotton goods, not included in the foregoing schedule, unbleached, valued at over sixteen cents per square yard, bleached, valued at over twenty cents per square yard, colored, valued at over twenty-five cents per square yard, and cotton jeans, denims and drillings, unbleached, valued at over twenty cents per square yard, and all other cotton goods of every description, the value of which shall exceed twenty five cents per square yard, there shall be levied, collected and paid a duty of thirty-five per centum ad valorem. AND PROVIDED FURTHER, That no cotton goods having more than two hundred threads to the square inch, counting the warp and filling, shall be admitted to a less rate of duty than is provided for goods which are of that number of threads.

Fourth—On spool thread of cotton, six cents per dozen spools, containing on each spool not exceeding one hundred yards of thread, and in addition thereto, thirty per centum ad valorem; exceeding one hundred yards, for every additional hundred yards of thread on each spool or fractional part thereof in excess of one hundred yards, six cents per dozen, and thirty-five per centum ad valorem. On cotton thread or yarn when advanced beyond single yarn, by twisting two or more strands together, if not wound upon spools, four (4) cents per skein, or hank of eight hundred and forty (840) yards, and thirty per cent. ad valorem.

SEC. 2. *And be it further enacted*, That from and after the day when this act takes effect, in addition to the duties heretofore imposed by law on the importation of the articles mentioned in this section, there shall be levied, collected, and paid the following duties and rates of duty, that is to say:

On brandy, rum, gin, and whisky, and on cordials, liquors, arrack, absynthe, and all other spirituous liquors and spirituous beverages, 50 cents per gallon of first proof and less strength, and shall be increased in proportion for any greater strength than the strength of first proof.

On spun silk for filling in skeins or cops, 10 per centum ad valorem.

On iron bars for railroads or inclined planes, 10 cents for 100 pounds.

On wrought iron tubes, 1 cent per pound.

SEC. 3. *And be it further enacted*, That from and after this act takes effect, in lieu of the duties heretofore imposed by law on the importation of the articles mentioned in this section, there shall be levied, collected, and paid the following duties and rates of duty, that is to say:

On cotton, five cents per pound.

On illuminating oil and naptha, benzine, and benzole, refined or produced from the distillation of coal, asphaltum, shale, peat, petroleum, or rock oil, or other bituminous substances used for like purposes, forty cents per gallon.

On crude petroleum, or rock oil, 20 cents per gallon.

On crude oil, 15 cents per gallon.

On tobacco stems, 15 cents per pound.

On ready made clothing of silk, or of which silk shall be a component material of chief value, 60 per centum ad valorem.

On quicksilver, 15 per centum ad valorem.

SEC. 4. *And be it further enacted*, That section fifteen of an act entitled "An act increasing temporarily the duties on imports, and for other purposes," approved July fourteenth, eighteen hundred and sixty-two, be, and the same hereby is, amended so as to impose a tax or tonnage duty of thirty cents per ton in lieu of "ten cents." as therein mentioned: PROVIDED, That the receipts of vessels paying tonnage duty shall not be subject to the tax provided in section one hundred and three of "An act to provide internal revenue to support the government, to pay interests on the public debt, and for other purposes," approved June thirtieth, eighteen hundred and sixty-four, nor by any act amendatory thereof: PROVIDED FURTHER, That no ship, vessel, or steamer having a license to trade between different districts of the United States, or to carry on the bank, whale, or other fisheries, or on any ship, vessel, or steamer to or from any port or place in Mexico, the British provinces of North America, or any of the West India islands, or in all these trades, shall be required to pay the tonnage duty contemplated by this act more than once a year.

SEC. 5. *And be it further enacted*, That the term "statuary," as used in the laws now in force, imposing duties on foreign importations, shall be understood to include professional productions of a statuary, or of a sculptor only.

SEC. 6. *And be it further enacted*, That there shall be hereafter collected and paid on all goods, wares and merchandise of the growth or produce of countries [east] of the Cape of Good Hope, (except raw cotton and raw silk as reeled from the cocoon, or not further advanced than tram, thrown, or organzine), when imported from places west of the Cape of Good Hope, a duty of ten per centum ad valorem, in addition to the duties imposed on any such article when imported directly from the place or places of their growth or production.

SEC. 7. *And be it further enacted*, That in all cases where there is or shall be imposed any ad valorem rate of duty on any goods, wares or merchandise imported into the United States, and in all cases where the duty imposed by law shall be regulated by, or directed to be estimated or based upon the value of the square yard, or of any specified quantity or parcel of such goods, wares or merchandise, it shall be the duty of the collector within whose district the same shall be imported or entered, to cause the actual market value or wholesale price thereof, at the period of the exportation to the United States, in the principal markets of the country from which the same shall have been imported into the United States, to be appraised, and such appraised value shall be considered the value upon which duty shall be assessed. That it shall be lawful for the owner, consignee or agent of any goods, wares or merchandise, which shall have been actually purchased or procured otherwise than by purchase, at the time and not afterwards, when he shall produce his original invoice or invoices to the collector, and make and verify his written entry of his goods, wares or merchandise, as provided by section thirty-six of the act of March two, seventeen hundred and ninety-nine, entitled "An act to regulate the collection of duties on imports and tonnage," to make such addition in the entry to the cost or value given in the invoice as in his opinion may raise the same to the actual market value or wholesale price of such goods, ware or merchandise, at the period of exportation to the United States, in the principal markets of the country from which the same shall have been imported, and it shall be the duty of the collector within whose district the same may be imported or entered, to cause such actual market value or wholesale price to be appraised in accordance with the provisions of existing laws, and if such appraised value shall exceed, by ten per centum or more, the value so declared in the entry, then, in addition to the duties imposed by law on the same, there shall be levied, collected and paid a duty of twenty per centum ad valorem on such appraised value: PROVIDED, That the duty shall not be assessed upon an amount less than the invoice or entered value, any act of Congress to the contrary notwithstanding: AND PROVIDED FURTHER, That the sections twenty-third and twenty-fourth of the act approved June thirtieth, eighteen hundred and sixty four entitled "An act to increase duties on imports, and for other purposes," and all acts and parts of acts repuiring duties to he assessed upon commissions, brokerage, costs of transportation, shipment, trans-shipment, and other like costs and charges incurred in placing any goods, wares or merchandise on shipboard and all acts and part of acts inconsistent with the provisions of this act are hereby repealed.

SEC 8. *And be it further enacted*, That so much of an act entitled "An act to authorize protection to be given to citizens of the United States who may discover deposits of guano," approved August eighteen, eighteen hundred and fifty-six, as prohibits the export thereof, is hereby suspended in relation to all persons who have complied with the provisions of section second of said act, for two years from and after July fourteenth, eighteen hundred and sixty-five.

SEC. 9. *And be it further enacted*, That this act shall take effect on and after the first day [of] April, eighteen hundred and sixty-five.

SEC. 10. *And be it further enacted*, That so much of sections thirty nine, forty, forty-one, forty-two, forty-three and forty-four of the act entitled "An act to regulate the collection of duties on imports and tonnage," approved March second, seventeen hundred and ninety-nine, as requires the branding or marking, and certifying of casks, chests, vessels, and cases containing distilled spirits or teas, be, and the same is hereby, revived, to he executed under such rules and regulations as shall be prescribed by the Secretary of the Treasury.

SEC. 11. *And be it further enacted*, That flax and hemp machinery and steam agricul-

tural machinery, as designated in section 21 of the act, "to increase duties on imports and for other purposes," approved June thirtieth, eighteen hundred and sixty-four may be imported free from duty for one year from the passage of this act.

SEC. 12. *And be it further enacted*, That in all proceedings brought by the United States in any court for due recovery as well of duties upon imports alone, as of penalties for the non-payment thereof, the judgment shall recite that the same is rendered for duties, and such judgment, interest and costs shall be payable in the coin by law receivable for duties, and the execution issued on such judgment shall set forth that the recovery is for duties, and in case of levy upon and sale of the property of the judgment debtor the marshal shall refuse payment from any purchaser at such sale in any other money than that specified in the execution.

SEC. 13. *And be it further enacted*, That the eighth section in the act of March twenty-third, eighteen hundred and fifty-four, "to extend the warehousing system by establishing private bonded warehouses and for other purposes," which authorized the Secretary of the Treasury, in case of the actual injury or destruction of goods, wares or merchandise by accidental fire, or other casualty, while in warehouses under bond, &c., to abate or refund the duties paid, or accruing thereon, be extended, so as to include goods, wares or merchandise injured or destroyed in like manner while in the custody of the officers of the customs, and not in bond; and also to goods, wares, and merchandise, so injured or destroyed, after their arrival within the limits of any port of entry of the United States, and before the same have been bonded [landed] under the SUSPENSION [supervision] of the officers of the customs: PROVIDED, That this act shall apply only to cases arising from and after its passage, and to cases where the duties have not already been paid.

Approved, March 3, 1865.

## THE PREVENTION OF RAILWAY DISASTERS.

We insert the following article from the *American Artisan* on railroad accidents. The *Times* is right in saying that the *main cause* of all railroad accidents is *carelessness or negligence*. We have had occasion to look into a great many of those accidents. There are but two ways in which legislation can prevent railroad accidents: 1. By making gross negligence *criminal*; 2. By compelling the companies, as a matter of police regulation, to keep a watchman on each mile of their roads; that is to keep the whole line thoroughly watched and guarded. This is the only mode in which legislation can do any good at all:

The *Railway Times* (March 4) dissents from our view that a tax on the net income of railways, instead of duties on their iron and steel, would tend to safety; and says that there are in most if not all States already insurers of lives as well as goods; and that they are prosperous, and able to keep up their plant; and that carelessness *is* the cause of the accidents.

We have often said that if they were prosecuted they would have to pay for lives and injuries: what we meant, in the article commented on by the *Times*, was, that individuals should appeal to the laws, and establish as a practice, what is now too much like a dead law. As to their profits; if they made as much as the New York street-railways, they would not abate a dollar of net profit unless obliged to do so: we don't think there can be much difference between our opinions on these two points.

The main point of difference seems to be, whether the carelessness of employés, or the worn and unsafe condition of the lines and rolling plant, is the chief cause of the increasing disasters. On this point we have had some testimony of experts in a recent case on the New Haven Railway; it was that the track was in an extremely worn and rotton condition; and we have seen credible statements that many roads are not in good repair. As to locomotives, they are not in an average condition of repair and soundness, as we know from the best authorities. And this state of the plant is just on the verge of economy, as estimated by men in authority. If the iron could be replaced at prices that would rule if there were no duty on it, it would increase their profits to renew their tracks, and, in a great measure, their axles, wheels and locomotives. And if, as we have urged, the benevolent would aid the bereaved to prosecute, that would still further insure the chances in favor of safety.

We grant that there is too often carelessness; but we deny that it is the chief cause; and, what is most to the point, we submit that careless men would be discharged more promptly, and carelessness would be more guarded against, if the consequences of it came upon the books as they did in the almost forgotten case of the New Haven Railway, thirteen years ago.

We do not know the state of Eastern shops; but in this region they are nearly all crowded with work, which of course is one reason of break downs and detentions. But not many losses of life have resulted from failures of engines: they are rather due to bad rails, axles, and car-wheels. And so far as they are due to locomotives, they are in a measure chargeable to the high duties, which prevent our shops from getting part of their work done abroad, as some have been compelled to do to meet their urgent demands, even with high duties to hinder them.—*American Artisan.*

— The Supreme Court of the United States at Washington, has decreed that the Eastern Division of the old La Crosse Railroad, claimed by the Saint Paul and Milwaukee Railroad Company, belongs to the Milwaukee and Minnesota Railroad Company, together with all the rolling stock and appertenances, subject to mortgages to an extent that surpass the market value of the profits, and the receiver is to be ordered discharged.

— The Portsmouth Spool Thread Co., New Hampshire, manufacture 18 different numbers —the coarsest No 8, the finest 120. The numbers designate skeins to a pound. Some idea of the fineness of No. 120 may be formed from the fact that each skein contains 840 yards, and the 120 skeins, weighing one pound, contain nearly 58 miles of thread—400 pounds of this number being enough to go round the world. The dyeing and bleaching department is on a scale with the other works. The spool thread is prepared in twenty different shades of color—enough to adapt it to every shade of cloth. About 450 hands are now employed, when in full operation it gives employment to about 600.

## LIABILITY OF COMPANY

FOR INJURIES OCCURRING WITHIN THE LIMITS OF THEIR TRACK.

The right of use or walk within the limits of a railroad track has been a fruitful source of litigation. The law, however, is now pretty well settled, that the use of a railroad track, cutting or embankment, except at lawful crossings of public roads or highways, is exclusively for the company and their employees; and a person on such track is where he has no right to be, and if he sustains injury by being there, the said road company is not liable, where want of ordinary care by the company is not shown.

What is ordinary care and what is negligence are inquiries, in most cases, to be answered by a jury; but negligence is not to be found without evidence. There is always a presumption against it, and therefore a plaintiff who asserts it and avers that he has received an injury in consequence of it, must adduce proof that the defendant did not exercise ordinary care. These principles are fully sustained by the case of the Philadelphia and Reading Railroad Company *vs.* Hummell, in the Supreme Court of Pennsylvania, lately decided. In that case the accident by which the party was injured occurred on a railroad, not at any street or crossing, but where neither the plaintiff nor any other person, except the agents of the railroad company had any right to be.

Judge Strong, in delivering the opinion of the court says:

It is time it should be understood in this State, that the use of a railroad track, cutting or embankment, is exclusive of the public everywhere, except where a way crosses it.

This has more than once been said, and it must be so held, not only for the protection of property, but what is far more important for the preservation of personal security, and even of life. In some other countries it is a penal offence to go upon a railroad. With us, if not that, it is a civil wrong of an aggravated nature, for it endangers not only the trespasser, but all who are passing or transporting along the line.

As long ago as 1852, it was said by Judge Gibson, with the concurrence of all the court, that "a railway company is a purchasery in consideration of public accommodation and convenience of the exclusive possession of the ground paid for to the proprietors of it, and of a license to use the highest attainable rate of speed, with which neither the person nor property of another may interfere."

The company on the one hand, and the people of the vicinage on the other, attend respectfully to their particular concerns, with this restriction of their acts, that no needless damage be done.

But the conductor of a train is not bound to attend to the uncertain movements of every assemblage, of those loitering or roving cattle by which our railways are infested. Railway Company *vs.* Skinner, 7 Harris 298. So in Railroad *vs.* Norton, 12 id., 465, it was said, "That until the legislature shall authorize the construction of railroads for something else than travel or transportation, we shall hold any use of them for any other purposes to be unlawful, if not indeed a public offence punishable by indictment."

But if the use of a railroad is exclusively for its owners, or those acting under them; if others have no right to be upon it; if they are wrongdoers whenever they intrude, the parties lawfully using it are under no obligations to take precautions against possible in-

juries to intruders upon it. Ordinary care they must he held to, but they have a right to presume and act on the presumption that those in the vicinity will not violate the laws; will not trespass upon the right of a clear track; that even children of a tender age will not he there, for though they are personally irresponsihle, they can not he upon the railroad without a culpable violation of duty by their pareots or guardians. Precaution is a duty only so far as there is reason for appre hension. No one can complain of want of care in another where care is only rendered necessary hy his own wrongful act.

It is true that what amounts to ordinary care under the circumstances of a case is generally to he determined hy the jury. Yet a jury can not hold parties to a higher standard of care than the law requires, and they can not find anything negligence which is less than a failure to discharge a legal duty. If the law declares, as it does, that there is no duty resting upon any person to anticipate wrongful acts in others, and to take precaution against such acts, then the jury can not say that a failure to take such precaution is a failure in duty and negligence. Such is this case. The defendants had no reason to suppose that either man, woman or child, might be upon the railroad where the accident happened. They had a right to presume that no one would be on it, and to act upon the presumption.

Blowing the whistle of the locomotive, or making any other signal, was not a duty owed to the persons in the neighborhood, and consequently the fact that the whistle was not blown, nor a signal made, was no evidence of negligence.

Were it worth while, ahundant authority might he cited to show that the law does not require any one to presume that another may be an active wrong-doer. The principle was asserted in Brown *vs.* Lynn, 7 Casey 510, and in Reeves *vs.* The Delaware, Lackawanna and Western Railroad Company, 6 id., 454. It is too well founded in reason, however, to need authority. We act upon it constantly, and without it there could be no freedom of action.

There is as perfect a duty to guard against accidental injury to a night intruder into one's bed chamher, as there is to look out for trespassers upon a railroad where the puhlic has no right to he.

And the rule must he the same whether the railroad is in the vicinage of many or few inhabitants. In the one case as in the other, going upon it is unlawful, and therefore need not be expected.

In this case it appears that there are fifteen houses hetween the railroad and the public highway, all hut two of them huilt since the railroad was constructed. The danger of trespassing may have heen increased, hy the increase of the population, hut the standard of duty in the use of one's property is not elevated or depressed hy a varying risk of unlawful intrusions upon his rights.

Of course we are not speaking of the duties of railway companies to the puhlic at lawful crossings of their railways.

We refer only to their ohligations at points where their right is exclusive; and as we find no evidence of any negligence of the defendants which caused an injury to the plaintiff, we think the jury should have heen so instructed, and the third and fifth points of the defendant should have heen affirmed.

Judgment reversed, and a new *venire* ordered.

## JOURNAL OF RAILROAD LAW.

### PUBLIC NUISANCE.—FOOTWAY CANAL.—CONSTRUCTION OF STATUTE.

The late case of Binks, administrator &c., against The South Yorkshire Railway and River Dun Company, was an action hy the plaintiff, as father and administrator of Benjamin Binks. The complaint alleged that the defendants were possessed of land near to and adjoining an ancieut common and puhlic footway, and had made and constructed and were possessed of a certain hole, ditch, cut and canal in and upon the said land, and adjoining and close to and by the side of the said ancient and common and public footway, and being wholly unfenced, unguarded and unlighted by day or hy night, and then containing a large quantity of water; that the existence of the said hole, ditch, cut and canal so heing in and upon the land so adjoining the said ancient and common and puhlic footway, and so heing wholly unfenced, unguarded and unlighted hy day or hy night, and so containing a large quantity of water, was dangerous to any person passing along the footway, either hy day or night, even if ordinary care were employed hy such person, and was a nuisance to the said ancient, and common and public footway, and to all persons using the same, and the defendants, hy reason of the premises and of their possession of the said land, ought to have sufficently guarded, fenced off, railed in and lighted the said hole, ditch, cut and canal, so as to prevent damage or injury to person or persons lawfully passing in and along the footway; yet the defendants while they were so possessed of the land, and of the hole, ditch, cut and canal as aforesaid, wrongfully and contrary to their duty in that behalf, permitted and suffered the land and the hole, ditch, cut and canal to he and continue, and the same were before and at the time of the death of said Benjamin Binks, so wholly unguarded, not fenced off or railed in, and without any light, that hy reason of the premises, and by reason of the existence of the hole, ditch, cut and canal in and upon the land and adjoining the ancient and common and puhlic footway, so wholly unfenced, unguarded and unlighted as aforesaid by day or hy night, and containing a large quantity of water as aforesaid, and hy reason of the want of proper and sufficient guarding, fencing off, and railing in and lighting of the hole, ditch, cut and canal as aforesaid, the same Benjamin Binks, who was lawfully passing in and upon the footway, lost his way, missed his path, slipped and fell into the hole, ditch, cut and canal, and was therehy killed, &c.

The defendants, after pleading a general denial, alleged that they were not possessed of the land near to or adjoining the ancient common and puhlic footway; that the defendants had not made and constructed, nor were they possessed of, the hole, ditch, cut and canal in or upon the land of the defendants, adjoining or close to or hy the side of the ancient, common and puhlic footway, that the existence of the hole, ditch, cut and canal so heing on their land was not dangerous to any person passing along the footway, either by night or hy day, nor was it a nuisance to the ancient or common and puhlic footway, nor to all persons using the same; that it was not the duty of the defendants to have so sufficiently guarded, fenced off, railed in and lighted the hole, ditch, cut and canal as to prevent damage or injury to any person or persons lawfully passing along the same.

On the trial it appeared that the deceased was 16 years old, earning 6s. a week as an apprentice, and was also employed hy a tradesman to go errands, for which he received from 2s. 6d. to 4s. a week. On the 6th of March, 1861, he was sent on one of these errands to "The Holmes." He started hy the 7 o'clock train from the Rotherham, hnt through some mistake, instead of getting ont at "The Holmes," he went on to Brightside, and, not having sufficient money to pay his fare hack, he set off to walk to "The Holmes" along a foot-path, the night being wet and dark. The deceased had reached "Jordan cottages," hy the side of a canal of which the defendants were proprietors, and after resting there a short time he resumed his jonrney, and had proceeded along the footpath mentioned in the pleadings, hut shortly afterwards fell into the canal and was drowned. This footpath is an ancient footpath from Sheffield to Rotherham. From Jordan Dam to half way towards "The Holmes" it follows the margin of a goit or ditch, as to which there was no evidence when it was made. There was a slight hreadth of grass beyond the footpath and the goit or ditch. The defendants constructed their canal in 1834, nnder the powers of an act of Parliament, and afterwards made a towing path abont eight feet wide. In the first instance there was grass land between the footpath and the towing path all the way from Jordan Dam to "The Holmes," the width of the grass varying from nothing to four or five yards. Soon after the canal was opened the tenant of the lands heyond Jordan Dam asked permission to cart up the hank along the canal or strip of land hetween the towing path and footpath; this was conceded hy the defendants upon a payment of 2s. 6d. a year, and they also received 1d. for every cart helonging to other persons who used the road. This use of the road destroyed the grass between the footpath and the towing path; and the defendants for the purpose of reparing the road and footpath, had covered the surface of hoth with ashes or cinders. At the place where the hody of the deceased was found, the footpath was close to the goit or ditch. The whole space hetween the goit or ditch and the canal was ahont 22 or 24 feet wide, the towing path heing 6 feet wide, the footpath 3 or 4 feet wide, and the remaining space ahout 14 or 15 feet wide, heing between the footpath and the towing path; the surface of that space was the same, so that the footpath was undistinguishahle from the road. The canal was unfenced and unprotected.

By consent, a verdict was entered for the plaintiff, with 60*l.* damages, leave being reserved to the defendants to move to enter a nonsuit, if the conrt should he of opinion that there was no evidence on which the jury could properly find a verdict for the plaintiff.

The defendants' counsel obtained a rule accordingly, which was afterwards argued, and judgment given.

The plaintiff's counsel showed cause and the defendants' counsel were heard in support of the rule.

WIGHTMAN, J.—I am of opinion that this rule should be made ahsolute. Here the canal is said to be adjoining a common and puhlic footway. In trnth it was not, it was at the distance of several feet—ahout 24. It is true that there was no fence, properly so called, hetween the public highway and the canal, to prevent persons passing from the former to the latter, and it seems that from circumstan-

ces, the destinction hetween the pathway and the intermediate space has become obliterated.

Now I adopt the view taken by the Court of Common Pleas in Hoursell *vs.* Smyth, 7 C. B. N. S. 731, and in particular that part of the judgment of Keating, J., in which he says, "To throw upon the owners the obligation of fencing this excavation in their waste land adjoining the roads, it ought to be shown that the excavation was so near to the roads as to be dangerous to persons lawfully using them." And Williams, J., observes, "No right is alleged: it is merely stated that the owners allowed all persons who choose to do so, for recreation or for husiness, to go npon the waste without complaint, that they were not churlish enough to interfere with any person who went there. One who thus uses the waste has no right to complain of an excavation he finds there. He must take the permission with its concomitant conditions, and, it may be, perils.,'

There can be no question that here the public have been permitted without objection, to pass over the intermediate space hetween the road and this dangerous canal; but no right in them to pass over it is alleged, they have at most only a mere permission, and those who take that permission, must take it with all chances of meeting with accidents. The defendants were not under any obligation to fence the highway against the canal, which was not shown to he so near as to be dangerous to a person using the road in the regular line.

Blackburn. J.—I am of the same opinion. Hardcastle *vs.* The South Yorkshire Railway and River Dun Company, 4 H. & N. 67, is an authority in point, where it was held, in considered judgment of the court, that an excavation into which a party falls must be adjoining to a public way, in order to render the owner of the land liable for the mischief. The Lord Chief Baron, in delivering judgment says, "When an excavation is made adjoining to a public way, so that a person walking upon it might, hy making a false step, or being effected with suddeu giddiness, or, in the case of a horse or carriage way, might, by the sudden starting of a horse, he thrown into the excavatiou, it is reasonable that the person making such excavation should be liable for the consequences. * * * * We think that the proper and true test of legal liahility is, whether the excavation be *substantially* adjoining the way, and it would be very dangerous if it were otherwise, if in every case it was to be left as a fact to the jury, whether the excavation were sufficiently near to the highway to be dangerous."

I do not say whether that decision is rigbt or wrong: in either event we are hound by it in this Court; and it is not a question for the jury, but for the judge, was the excavation substantially adjoining the way. I do not think it is possible, on the evidence here, to say that this canal was adjoining the highway originally. There was an intervening breadth of towing path, of about 9 feet, and a strip of grass which was agreed to be a marked and real distinction.

In order to distinguish this case from that to which I have referred, it was argued that such alterations had been made in the towing path that they obliterated the distinction between it and the footway, and so rendered it not noticcable, especially by night, and consequently dangerous. But I do not think that that amounts to making the canal adjoin the footway, if it did not do so before.

There may possibly he cases where the owner of land adjoining a way, may, by his acts, induce the public to go near to an excavation in his land so as to get into danger; in which case it would be the same thing whether the way were a highway or not. But that should he distinctly proved, whereas the only evidence adduced here amounts to nothing of the kind.

Mellor, J.—Hardcastle *vs.* The South Yorkshire Railway and River Dun Company, explaining as it does Barnes *vs.* Ward, 9, C. B. 392, is rightly decided, and I think the only difference between that case and the present is, that the judgment there assumes that the going off the towing path would be a trespass, here, perhaps, trespass would not be maintainable. The persons here who say that they are not trespassers hy going out of the footway, must take there licence with its dangers.

There was therefore no evidence to go to the jury, and this rule must he made absolute.

Rule absolute.

## TERRITORY OF ARIZONA.

The capital of Arizona grows apace. Where in June last the wild grass had seldom been pressed by the foot of the white man there are rows of stores and shops, and clusters of rude but comfortable dwellings. The huildings are mostly of logs, there heing no saw-mill here until within a few weeks. Now one of much power is in full operation, turning out thousands of feet of lumber per day. The scream of the steam-whistle sounds strange enough in this wilderness, and is a stirring evidence of the rapid march of civilization.

The first legislature assembly of Arizona adjourned November 10th, after a session of forty-three days. An excellent code of laws was adopted, embracing the best features of the New-York and California codes, and including a chapter upon mining rights, which if followed, will be likely to prevent the endless litigation here which has incumhered the mining interests of Nevada and Colorado.

It will be a satisfaction to capitalists, attracted by our rich mines, to know that they may invest here without risk of title, and with other marked advantages. As I have before written, the facilities for working the mines in this central part of the Territory are excellent. Wood and water are abundant for mills, and the climate will admit of labor at all seasons. As yet no machinery has reached here. The tests made on a limited scale prove the quartz hoth of gold and silver to he unusually rich. The lodes are among the largest ever discovered. I have visited a number which measure from ten to twenty feet in width. The rock is of varied quality, hut most of it well adapted to crushing. It is the general helief that a large proportion of the lodes will pay from the surface.

The copper mines attract comparatively little attention, although some of them bear the ore almost pure. When good roads are provided and the navigation of the Colorado River is improved, fortunes will be made in opening these mines. The Legislature gave liheral charters for road companies, and in every way labored for the speedy upbuilding of the country. The members from below the Gila River made a strong effort to take the capital to Tucson, hut it was in vain. By another year this place and this part of the Territory will have a population and influence that will make removal impossible. The establishment by Congress of a mail route from the Rio Grande here, and from Los Angeles here, will insure a new overland road of great importance. Without the snows of the northern route, and the sand and heat of the thirty-second parallel, (the Butterfield route) the thirty-fifth parallel possesses great advantages, and fairly opened, it will challenge cumpetition. The mail is to he brought from Albuquerque, on the Rio Grande, to Prescott in six days. It can he brought from Los Angeles to Prescott in fuur. The provision of any regular means of communication with the East or the West will be most acceptable to our people. Now depending upon irregular military expresses, and anon upon more irregular private carriers, and much of the time without dependence of any sort—as just at present—it is difficult to transact husiness with any degree of promptness or satisfaction. —[*Stockholder.*

## FLAX MANUFACTURES.

In the early history of this country flax was an important item which entered into its manufactures. Our good grandmothers considered a knowledge of spinning and weaviug an indispensable accomplishment, and every girl was inducted into the practice of these household arts. In those days cotton was scarcely known, and our cloths were linens and woolens, hoth the product of hand-work. The raw fabrics were carded and prepared for manufacture hy hand, for a long period, but carding machines were finally introduced, which converted wool into "rolls" which were then spun by hand, and subsequently woven hy the same means. But no machine was invented to prepare the flax, and its manufacture was continued hy hand till its use was superseded by cotton. In the early manufacture of this, the weaving was done hy hand, the yarn heing spun by machinery and then distributed throughout the country to he woven. After this, the manufacture of flax almost entirely ceased, and when in the progress of cotton manufactures the power loom was adopted, the question was settled, and manufactures of flax were only to he remembered. The fabrics, however, survived, and remained a fitting tribute to the industry and manual skill of the mothers and daughters of the generation that has passed. Occasionally, now, there are families where the linen has descended and is treasured as a legacy. Much of this old linen has furnished lint and bandages for our noble army.

Within a few years the attention of manufacturers has been directed to the possibilities of again resuming the manufacture of flax, by machinery. Considerable difficulty has been experienced in reducing the fibre to a proper state to he operated upon, and numerous experiments have been instituted. Various degrees of success have attended these efforts, and there is a good prospect that the culture and manufacture of flax will, ere long, become an important element in our industry. We are not aware that so great progress had been made and such a variety of articles had been manufactured, till we saw, a day or two since, at the office of Governor Smith, several kinds of goods made from flax fibre, such as carpets, heavy crash and seamless hags, the latter heing the principal manufacture, the other articles heing introduced to show the applicability and value of the fibre, large quantities of it till recently heing thrown away after the seed had been secured. On inquiry, we learned that Governor Smith, as early as September, 1862, determined to enter upon the

business. He erected works at Delaware, Ohio, which have been in operation more than a year. There is a brick mill, 128x40 feet, with machinery of the most approved kinds for the breaking and scutching of the straw, with pickers, &c., the power being furnished by a Corliss steam engine. Connected with the mill is a barn, the largest in the State, being 250 feet long and 50 wide, for receiving and storing the straw. After being reduced and prepared, the product is brought to Rhode Island and manufactured into the articles above mentioned. The machinery running at present is at River Point, and two other mills are now being prepared and fitted with the necessary machinery, at Scituate, where it is intended to continue the manufacture of all articles of the coarser fabrics, usual to produce from flax with the present processes for preparing it.—*Providence Press.*

☞ A correspondent of the *Missouri Republican* writing in behalf of the Iron Mountain Road as one of the most advantageous lines to St. Louis, says:

What has made Chicago nearly double her population during the last four years? The Southern trade through the Illinois Central Railroad. By that trade, the city of Chicago has been enabled to completely outstrip St. Louis—leaving the latter to sit and "gnaw her fingers," because she had no direct railroad communication to cotton and sugar, and Illinois—always wakeful—begins to see the probability of the ultimate extension of our own road; and has already projected a railroad from East St. Louis direct to Cairo, directly along the Mississippi river. Such a road would very greatly benefit "East" St. Louis; but every dollar it benefits the embryo city will be at least one dollar lost to the mature city. The city of St. Louis has the right to protect her own interests; and she has the means wherewith to protect that right.

☞ The bridge recently built across the Mississippi river at Clinton, Iowa, for the use of the Northwestern Railway is 3,650 feet, or more than three-fifths of a mile long. Of this distance 2,800 feet is between the Illionis shore and Little Rock Island, and 850 feet is between Little Rock Island and Iowa shore. The bridge east of Little Rock Island consists of 14,000 feet of piling and seven spans of 200 feet each. West of Little Rock Island the bridge consists of three spans beside the draw. The draw is 800 feet long over all, and is built of iron. The abutment and one of the piers are founded on rock, a second pier is founded on piles, and a third pier and the draw pier are built upon crib work, resting on loose sand. These cribs are sunk in water forty feet deep. The large crib is 400 feet long and 44 feet wide, and the smaller is 160 feet long and 44 feet wide on the bottom. The draw turns on a pivot in the center, and when open leaves two clear passage ways for steamboats, 123 feet each. The draw weighs about 855 tons.

— The earnings of the Chicago and North Western Railway Company for the second week in March were:

| | |
|---|---|
| 1865 | $111,786 49 |
| 1864 | 87,098 09 |
| Increase | $24,688 40 |

— The earnings of the Erie Railway for the month of

| | |
|---|---|
| February, 1865, were | $886,038 71 |
| February, 1864 | 934,133 07 |
| Decrease | $48,094 36 |

## DUBUQUE & SIOUX CITY RAILROAD.

The President states that the earnings of the road, from different sources, for 1864, were:—

| | |
|---|---|
| Passengers and mails | $136,296 89 |
| Freight and express | 275,653 82 |
| Rents | 205 00 |
| Total | $425,155 71 |
| Expenses, Improvements, &c. | 249,877 85 |
| Net earnings | $162,267 86 |

The rapid increase of business incident to the settlement and development of the country west of Dubuque for 200 miles in the interior of the State may be inferred from the following table showing the increase of earnings of the road for each year since 1859:

| Year. | Length of road. | Earnings. | Increase. |
|---|---|---|---|
| 1858 | 37 miles. | $62,519 68 | ..... |
| 1859 | 37 " | 58,620 19 | ..... |
| 1860 | 80 " | 121,025 95 | $62,405 76 |
| 1861 | 100 " | 199 410 11 | 78,384 17 |
| 1862 | 100 " | 228,159 59 | 29 149 42 |
| 1863 | 100 " | 276,197 40 | 47,637 87 |
| 1864 | 100 " | 412,425 71 | 135,958 31 |

It will be seen the gross earnings for 1864 were nearly double those of 1863; that the increase for 1864 over those of 1853 was nearly triple.

The rolling stock of the company now consists of eleven locomotives, seven passenger cars two baggage cars, two mail and express cars, thirty-seven flat cars, eighty box cars, five way cars. and twenty cattle cars. And yet with careful management this amount of rolling stock is said to be insufficient to do the business of the country traversed by the road.

The total mileage of freight and passenger trains for the year was 181,827 miles, at a cost of $1.26 per mile.

The prospect of the extension of the road beyond Cedar Falls is expressed in the following extract:

"Owing to low water in the Mississippi, the contractors were unable to bring down the bridge timbers sawed in Wisconsin for the bridge at Cedar Falls; they were compelled to contract for lumber in Chicago, and which was obtained only after great expense and delay. The bridge across the Cedar was completed about Christmas, consequently no track was laid on the second division in 1864. And even if the bridge timbers could have been obtained, very great difficulty was experienced in forwarding the iron, chairs and spikes. Iron that was purchased and paid for in June, only left New York in September, and very little of it reached Dubuque in time to use during last fall. The iron, chairs and spikes are all purchased and paid for except a balance of thirty-eight thousand dollars due on iron. The grading is done to Ackley, a distance of thirty-two miles from Cedar Falls, except about 77,000 yards which can be finished up early in the spring. The contractors are rapidly getting out ties and timber. We expect to lay the track through the bad cuts a short distance beyond Cedar Falls this winter, and have it blasted before the frost comes out in the spring. It is believed that the track can be completed to Ackley by the first of July, and to Iowa Falls by the first of September."

The report was dated on the 2d of January Since that time the laying of track has been commenced west of Cedar Falls, 100 miles west of Dubuque, and the extension of the line is now progressing.

The balance of the land grant to which the company will soon be entitled on completing the road to Sioux City, is 761,539 or 76,800 acres for every twenty miles as fast as finished.

The Superintendent reports, among other matters, that the earnings are not so large as they would have been, on account of the limited rolling stock and the inefficiency of the Transfer Company at all times to remove the freight from the ware-houses and elevator at Dubuque, and thereby causing business that legitimately belongs to Dubuque to seek other outlets. He says:

"A large warehouse, 250 by 40 feet, has been built at Dubuque during the last year as recommended in the last annual report, and we find it of great advantage in facilitating business. As soon as practicable, it is necessary that more depot grounds be provided at Dubuque. The increase of business has been so great that the present yard room is entirely too contracted for the business to be done with economy and expedition."

The Superintendent also urges the purchase of more rolling stock.

The report of the Ticket Agent states that 67,241 passengers were carried over this road in 1864, exclusive of soldiers.

The total amount of freight, both ways, as appears from the statement of the Freight Agent, for the year, was 160,072, 972 pounds, and the gross amount received for the same was $963,174 36.

The Dubuque and Sioux City Railroad Company now build their own cars. The Master Mechanic reports there had been built last year two baggage cars, sixteen house cars, two way cars, and two passenger cars have also been finished since the date of the report.

An examination of the country between Fort Dodge and Sioux City was made last year, and the route changed. The Engineer says:

"During the months of August and September, an examination of the country was made between Fort Dodge and Sioux City, with a view to changing the line from the old survey, making all necessary detours from a direct line between those two points, south instead of north. A survey of a line was made in October, November and December, going down the Valley of the Maple river to Onawa, in Monona county, and thence to Sioux City. Some of the advantages of this line over the old survey, are these: The country is better settled and better timbered; after leaving the Des Moines river, structures will have to be built entirely of wood, there being no stone between Fort Dodge and Sioux City. The distance on this survey from Fort Dodge to Onawa is 112½ miles, and to Sioux City, 149 miles."

The Engineer also reports in detail the amount of work done on a part of the second division of the road, from Cedar Falls to Iowa Falls, which is expected to be completed next fall.

The second division will reach Fort Dodge, 192 miles from Dubuque, and the whole distance from Dubuque to where the road will come near the Missouri river will be about 305 miles, and the distance to Sioux City about 331 miles.

The officers having in charge the business of the road for the past year, were: Platt Smith, President; Louis Boisot, Secretary and Treasurer; C. H. Booth, General Freight Agent; Geo. Young, Superintendent; Ben. Warne, Ticket Agent; Thos. W. Place, Master Mechanic; J. E. Ainesworth, Engineer.

The report is accompanied by a map showing the proposed connection with the Central Pacific Railroad, at a point west of Omaha in the valley of the Platte river.

## REPORT OF INTERNAL REVENUE.

CURIOSITIES IN THE INCOME TAX.

By the kindness of a friend, we have an early copy of the Report of the Commissioner of Internal Revenue. It is a volume of 300 pages, 280 of which are exclusively devoted to statistics. We propose to draw out of it some interesting articles, and commence to day with such an analysis of the statistics of the Income Tax as presents the subject in a new and attractive light.

GENERAL AGGREGATES.

The total of the Income Tax of all the loyal States, under two heads of incomes excluding $600, one not exceeding $10,000, at 3 per cent., and incomes over $10,000 at 5 per cent. It is to be remembered that the former includes all not exceeding $10,000, and the latter is only the excess above $10,000.

Another explanation is necessary. The column of total includes not only the two other colums below, but also the incomes from property in the United States owned by citizens residing abroad, which is assessed at 5 per cent., and the tax of 1½ per cent. on the incomes from interest on the securities of the United States.

| States. | 3 per cent. | 5 per cent. | Total. |
|---|---|---|---|
| Maine..... | $46,088 29 | $15,125 18 | $101,896 90 |
| N.H..... | 44,674 53 | 5,488 87 | 50,628 06 |
| Vermont..... | 36,935 22 | 1,250 00 | 98,466 00 |
| Mass ..... | 868,617 52 | 1,014,298 47 | 1 906 330 76 |
| R. Island..... | 106,289 16 | 257,448 48 | 364,998 29 |
| Connecticut.... | 215,405 54 | 154 320 90 | 315.172 12 |
| New York..... | 2,'35,310 45 | 2,833,794 65 | 4,924,282 96 |
| New Jersey.... | 326,232 19 | 156,515 26 | 425,822 84 |
| Penn..... | 1,075,110 85 | 942,974 86 | 2,038,457 03 |
| Delaware ..... | 50,135 91 | 25.863 99 | 76,295 90 |
| Maryland..... | 285 369 48 | 220,191 55 | 511 985 53 |
| D. Columbia.... | 105.561 33 | 38,761 59 | 146, 32 49 |
| Virginia..... | 36.734 04 | 3,812 50 | 40,631 21 |
| W. Virginia ... | 29 123 14 | 8,066 57 | 37,257 05 |
| Kentucky..... | 214,835 20 | 136,832 55 | 352,846 13 |
| Missouri..... | 205,923 30 | 168,979 19 | 376,768 08 |
| Tennessee. .... | 22,557 38 | 2,906 38 | 25,465 58 |
| Louisiana..... | 25.098 02 | 4,198 80 | 32,829 57 |
| Ohio..... | 741 371 84 | 370.688 31 | 1,117,980 90 |
| Indiana..... | 231,230 26 | 33.258 62 | 264,648 12 |
| Illinois..... | 359,851 21 | 224,452 56 | 586,435 00 |
| Michigan..... | 135 144 29 | 229,006 37 | 164,293 49 |
| Wisconsin..... | 101,766 14 | 23,273 67 | 125,109 46 |
| Iowa..... | 50,792 16 | 2,017 55 | 58,810 68 |
| Minnesota..... | 14,449 39 | 600 60 | 15.147 23 |
| Kansas..... | 14,271 17 | 8,173 87 | 22 449 42 |
| California ..... | 430,598 21 | 148,187 60 | 582,475 82 |
| Oregon..... | 29,444 86 | 7,126 20 | 36,596 76 |
| Nebraska Ter'y.. | 6,365 72 | 937 50 | 7,309 97 |
| N. Mexico Ter'y. | 1,073 43 | ..... | 1,073 43 |
| Utah Territory.. | 4 039 93 | ..... | 4,0 9 93 |
| Colorado Ter'y.. | 12.597 42 | ..... | 17,658 15 |
| Nevada..... | 27,606 34 | 11,320 41 | 38,936 75 |
| Wash. Territory. | 7,390 68 | ..... | 7,390 68 |
| Total..... | $7,944,153 51 | $6,855,160 37 | $14,933,362 32 |

The most striking features of this table are—

1. That on large incomes, to-wit: over $10,000, Rhode Island has paid $1 48 per head of population; Massachusetts, 82c.; New York, 73c.; Ohio, 16c.; Kentucky, including slaves, 12c., and Indiana, 2c. per head. It is further curious that in Kentucky all the Congressional Districts paid this 5 per cent. tax, while eight districts in Ohio and only one in Indiana paid no tax on the excess above $10,000. California paid 36c. per head of larger incomes; and as for Nevada it is impossible to calculate anything definite, as the population of 1860 would be no criterion.

2. That on the total income tax Rhode Island paid $2 09; Massachusetts, $1 55; New York, $1 27; Ohio, 48c.; Indiana, 19c.; and Kentucky 30c. per head.

3. That the smallest amount of income tax per head was paid by Wisconsin—16c.; Minnesota, 9c.; and Iowa 9c. per head. These States can, however, congratulate themselves on having less of absolutely miserable poverty, according to the population, than is found in the States that afford so much greater incomes.

4. It will also be noticed that while Iowa paid but $2,047, and Minnesota $600, Kansas paid $8,183 on incomes above $10,000.

THE RICHEST DISTRICTS.

The richest districts, as measured by the income tax, are:

| District. | 3 per cent. | 5 per cent. | Total. |
|---|---|---|---|
| 8th N. Y . ... | $316,066 14 | $1,061,362 25 | $1,379,012 68 |
| 6th N. Y..... | 242 978 26 | 675,737 43 | 931,592 21 |
| 4th Mass..... | 200,364 90 | 447.409 17 | 660,204 60 |
| 3d Mass..... | 226 435 72 | 288.281 68 | 518,834 08 |
| 2d Pa..... | 199,124 05 | 291,107 18 | 491,153 98 |
| 3d N. Y..... | 186,088 08 | 269 888 07 | 457,890 02 |
| 1st Cal..... | 247,377 72 | 124,041 16 | 374,838 71 |
| 1st Ill..... | 151 249 06 | 191,708 59 | 344,529 60 |
| 1st Mo..... | 150,279 18 | 161,348 64 | 313,427 93 |
| 3d Md..... ... | 123,017 15 | 147,334 28 | 274,567 39 |
| 5th N. J..... | 143,177 47 | 109,193 22 | 253,892 80 |
| 10th N. Y..... | 89,136 07 | 140,724 01 | 234,028 58 |
| 4th Pa..... | 107,780 76 | 103.194 86 | 217,052 74 |
| 4th Ohio..... | 84,577 98 | 133,655 70 | 218,687 83 |
| 3d Ky..... | 108,255 42 | 105,145 27 | 214,530 34 |
| 2d Ohio.. ..... | 97,632 54 | 113.441 68 | 211,638 52 |

These districts contain large cities. As to the predominence of the First California, gold explains it. As to the position of the First Illinois as sixth in rank above the First Ohio, it should be recollected that Chicago has rapidly increased since 1860, and that district is nearly equal to both the First and Second Ohio. The population of Chicago in 1860 was 109,260, while now it is not far from 180,-000. The same cannot be said, however, for the First Missouri, which ranks fifth above the First Ohio, because while the population of St. Louis in 1860 was 160,773, that of 1864, just reported, was but 165,000, showing a less increase than Cincinnati has made.

Another striking development from the last table is that the First Illinois paid $191,708, while the First Ohio paid but $133,655 and St. Louis paid $161,348, on large incomes. It will also be seen that the Eighth New York contains the heaviest incomes having paid $1,051,362 of 5 per cent. tax, while the next richest is the Sixth New York, $675,739; the next, the Fourth Massachusetts, $447,409.

THE POOREST DISTRICTS.

The districts paying the smallest income tax are as follows:

| Districts. | 3 per cent. | 5 per cent. | Total. |
|---|---|---|---|
| 5th Ill.. ..... | $1,962 27 | ..... | $1,962 27 |
| 6th Iowa..... | 2 922 59 | ..... | 2,922 59 |
| 11th Ill..... | 3 303 93 | ..... | 3.311 43 |
| 2d W. Va..... | 3.359 19 | ..... | 3,'87 09 |
| 1st Minn..... | 3,832 13 | ..... | 3 832 13 |
| 5th Iowa..... ..... | 5 522 28 | ..... | 5 5 2 28 |
| 5th Wis..... | 6 283 30 | $759 | 7,033 30 |
| 31st N. Y..... | 7,467 35 | ..... | 7,527 95 |
| 3d Wis ..... ..... | 7,134 26 | 308 65 | 7,948 42 |
| 2d Mo ..... | 8,636 79 | ... ... | 8,679 89 |
| 3d N. H ... ..... | 8.597 91 | 1,900 00 | 8,715 25 |
| 4th Iowa..... | 8,715 25 | ..... | 10,505 57 |
| 3d Vt..... | 9,427 74 | 1,250 00 | 10,732 00 |
| 3d Me ..... | 10,707 96 | ..... | 10,742 80 |
| 2d Minn..... | 10.617 10 | 650 00 | 10,079 01 |
| 11th Ind..... | 11,069 01 | 10 00 | 11.301 10 |
| 5th Mich..... | 11,370 80 | ..... | 11,376 83 |
| 15th Ohio..... | 11,472 37 | ..... | 11,500 75 |
| 18th N. Y.. ..... | 11,923 63 | ..... | 11,925 06 |

We do not mean by the "poorest districts" those which contain the greatest number of people who do not make a good living, but those which pay the least income tax. It is quite probable that not one twentieth part the number of poor people is found in the above districts, that is found in the "richest districts," and as far as general happiness is concerned, those "poorest districts" may be comparatively in a blessed condition.

CALIFORNIA MACHINE-SHOPS.—The *Mining and Scientific Press* says the shops are making their own tools; a shaping machine, two six foot lathes, a punching machine, and a pipe and bolt machine have lately been made in one shop. This is deemed advantageous, because it retains the gold in California. How would it do to keep the coals in Newcastle?

## SALE OF THE CENTRAL OHIO R. R

The property, franchises, &c., of the Central Ohio Railroad Company, were yesterday sold at public sale, by H J. Jewett, Special Master Commissioner, for that purpose appointed by the Circuit Court of the United States for this district, to J. W. Garrett, President of the Baltimore and Ohio Railroad Company, and W. H. Clement, President of the Little Miami Railroad Company, as trustees, who, in the purchase, represent the creditors and stockholders of said company, parties to an agreement looking to the capitalization and reorganization of the affairs of that company.

By the order of sale, no bid for less than $1,000,000 could be received by the commissioner. The sale was marked at that sum, subject to the first and second mortgages, upon which there was due, on the first day of January last, as found by the Court, about $2,800,000

As we have remarked, the purchase was made and the property will be held by the parties named, in trust, for such of the creditors and stockholders as are parties to the agreement stated; and we understand, from the gentlemen making the purchase, that all creditors and stockholders who have not signed the agrecment and surrendered their claims, in accordance with the terms thereof, will have the opportunity of doing so at any time previous to the confirmation of the sale, which they will consent to be postponed to as late a day as the parties in interest may think is proper.

By the terms of the agreement, which we have had the opportunity of examining, interest upon all claims proposed to be settled under it, is ignored, and the principle alone is dealt with. The Foruth Mortgage Bonds, the first in order of priorities, are to be paid in common stock at par, or in preferred stock at eighty cents to the dollar, at the election of the holder; the Income Bonds at eighty cents to the dollar in common stock, or at sixty cents in preferred stock, at the election of the holder. The Floating Debt will receive sixty cents to the dollar in common stock, and the present stockholders forty cents. By this programme, the liabilities of the company will be reduced to about $5,000,000, which is regarded as a very reasonable estimate of its present and prospective value.

The agreement for the capitalization of the affairs of the company it is aimed to make eminently just in its provisions, and we refer to it now more at length than is our custom, that it may receive the full consideration of such of our readers as are interested in that company, and to advise them, now that they have the opportunity, to avail themselves of the time allowed by which they may become parties to it.

☞ Thirty-one miles of the Pacific Railroad in California are in operation. The Company receive $48,000 in bonds per mile for twenty-four miles, and $16.000 per mile for seven miles, making $1,264,000; and they are authorized to issue their bonds to the extent of $48,000 per mile, making of available resources $96,000 per mile. In addition, the State of California has loaned its credit to the extent of $1,500,000, on which the State is to pay the interest for twenty years. There is also due from Placer county, Sacramento and San Francisco $638.000. The California correspondent of the *New York Tribune* adds:

As each division of twenty miles is completed, the Company are entitled to bonds from the Government at $48,000 per mile, and by

the amendments of last winter they are authorized to issue their own first mortgage bonds for the same amount per mile, making $96,000 in bonds per mile, of available assets as the road progresses, beside the land grant of twenty sections per mile.

At present the company are employing about 1,000 men on the line, and intend to increase that number, as per advertisement, to 5,000 as the spring approaches. The work of grading up the mountain is very heavy, but the company will have twelve miles more ready for operating in May, which is to be extended to twenty-four miles by next summer. The income of the thirty-one miles of road now in operation has averaged $17,000 to 20,000 a month, and when twenty-four miles more are completed it will command so much of the Nevada trade, it it believed, as to increase the income to $100,000 per month The whole business and travel of Nevada and the Great Basin must pass over it long before it becomes a part of the line from the Missouri river to the Sacramento.

COAL IN FRANCE.—In excavating for the Bourbonnais Railway, says the *Progres de Lyon*, at a distance of two hundred or three hundred yards above L'Arbesle a small town about fifteen miles from Lyons, a seam of coal, which is said to be good, has been laid open. This accidental discovery is considered highly important, as indicating a coal deposit in this neighborhood at no great distance from the soil. France is not wanting in coal, but it exists in many cases where no economical means of transportation are yet established. No doubt good coal in the neighborhood of such an important manufacturing place as Lyons would be a great boon, but all the world knows how deceptive such discoveries are as the one referred to, add we have not a geological map of France at hand to tell us whether there is any thing new in the existence of coal in that quarter. Such facts, however, deserve to be noted, now that the import of English coal into France has grown so enormously.—[*Journal of the Society of Arts.*

## MONETARY AND COMMERCIAL.

During the last week the uniformity of the Gold Market (on which all other markets depend)—has been greater than in any week for a month. The changes have not been great. The fluctuations in gold in New York each business day during the week, were as follows:

| | Opening. | Highest. | Lowest. | Closing. |
|---|---|---|---|---|
| March | 21...155 | 159 | 154½ | 157 |
| " | 22...158½ | 158⅝ | 156½ | 157⅛ |
| " | 23...157 | 157½ | 152½ | 152¼ |
| " | 24...150⅜ | 152½ | 148½ | 152½ |
| " | 25...153½ | 157½ | 153½ | 155⅝ |
| " | 27...155½ | 155½ | 153⅛ | 154 |
| " | 28...154 | 154⅝ | ..... | 152¼ |

It will be seen that the *closing* rate was 4⅞ lower than it was a week ago, but this was a small difference, compared with what had been in the previous three weeks.

There is a strange feeling in the general markets, and prices have as a whole been nearly adjusted to the rates of money.

The following table, in reference to the past prices of gold is interesting, and may be useful.

| 1863. | Highest. | Lowest. |
|---|---|---|
| January | 160¾ | 133⅝ |
| February | 172½ | 152½ |
| March | 171¾ | 139 |
| April | 157⅞ | 145½ |
| May | 154¾ | 143½ |
| June | 148⅜ | 140½ |
| July | 145 | 123¼ |
| August | 129¾ | 122⅛ |
| September | 142 | 126⅞ |
| October | 156¾ | 140⅜ |
| November | 154 | 143 |
| December | 152¾ | 148⅛ |
| January 1864 | 159⅜ | 151½ |
| February | 161 | 157½ |
| March | 169¾ | 159 |
| April | 187½ | 166¼ |
| May | 190 | 168 |
| June | 250 | 193 |
| July | 285 | 228 |
| August | 261¾ | 231½ |
| September | 254½ | 186 |
| October | 228 | 489 |
| November | 260 | 216⅝ |
| December | 243 | 211⅛ |
| January 1865 | 234½ | 198 |
| February | 218 | 196⅞ |

The *Commercial* says, in reference to the Stock Exchange:

"The rooms engaged for the Cincinnati Stock and Gold Board, in the corner front of the Burnet House, have been put in order, and will be completely ready for the first call of Stock to-morrow, at 12 o'clock. All the arrangements have been made for proceeding at once to business, and dispatches which will be at the disposal of members, will be received every half hour, from the morning opening at New York throughout business hours. This alone will be a great item for business men. The inauguration of the institution will doubtless be quite an event to-morrow."

In regard to the rates of money and discounts, the same general fact, which affects all other business, effects this,—the fluctuation in the currency. The Bankers avoiding loaning, except to their own special customers, as much as possible; because they are not certain how these rapid changes may effect the mercantile class. Accordingly, discounts are limited, and the rates of interest high.

The *Commercial* says, in reference to State Banks:

"The notes of State Banks and banking corporatinns are getting into bad repute, and are being handled with caution. The law taxing such paper 10 per cent., which goes into operation July 1, 1866, will force them all to "wind up," and the reasonable presumption is, that a large number of these banks will not be able to redeem their notes, therefore, the depreciation of them, which has already commenced. The Wisconsin Bank paper has been thrown out at Chicago, and the Kentucky Bank paper has been thrown out at this place, and placed at a discounnt of 1 to 1½ per cent., because the parent bank refuses to redeem the notes of the branches, in greenbacks."

There is little doubt, that the State Banks will have to give way; and the National Banks become the exclusive system for the whole country. If the War should terminate soon—the credit and finances of the United States will become at once stable, and higher than any nation in the world. The basis of the National Banks being the Bonds of the Government,—the credit of these Banks would then become firmly established in the confidence of the people, and the National Currency would become the sole currency of the country.

Our readers may, as well look to a speedy peace, and a National paper currency, as the immediate result before them. Gold will probably come down to 10 per cent., but specie payments will probably not be resumed for two or three years.

THE EARNINGS OF INWA RAILROADS FOR 1864.—The gross receipts of the several railroad companies in the State of Iowa for the year 1864, are as follows:

Burlington and Missouri River Railroad Company—gross receipts, $390,237 00.

Cedar Rapids and Missouri River Railroad Company—gross receipts, $236,189 92.

Chicago, Iowa and Nebraska Railroad Company—gross receipts, $1,492,600.

Dubuque and Sioux City Railroad Company, including the gross receipts of the Cedar Falls and Minnesota Railroad, $398,238 43.

Duhuque Southwestern Railroad Company—gross receipts, $63,630 56.

Des Moines Valley Railroad Company—gross receipts, $318,395 88

Mississippi and Missouri River Railroad Company—gross receipts, $603,209 32.

Keokuk and Mount Pleasant Railroad Company—gross receipts, $56,103 91.

The McGregor Western Railroad at the present writing has not reported.

The total gross receipts of the several railrnad companies in the state for 1864 is $2,568,605 11, which yields a revenue to the amount of $25,686 05.

WRIGHTSON & CO.

BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO.

## CHANGE OF TIME.

[illegible] and Cincinnati



THREE THROUGH TRAINS DAILY, as follows:

| | Leave. | Arrive. |
|---|---|---|
| St. Louis and Chicago Express | 6.30 A. M. | 10.15 A. M. |
| Springfield & St. Joseph Express | 1.00 P. M. | 5.00 P. M. |
| St. Louis & Chicago Express | 4.00 P. M. | 1.30 A. M |

Sleeping cars by this train for St. Louis and Chicago

ACCOMMODATION TRAINS.

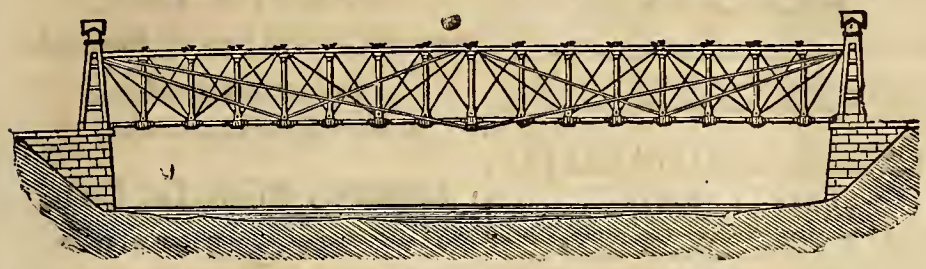
| | Leave. | Arrive. |
|---|---|---|
| Lawrenceburg Accommodation | 4.25 P. M | 8 35 A. M. |
| Harrison | 9.00 A. M. | 3.00 P. M. |

Through Tickets can be obtained at the Spencer House, Burnet House and Gibson House Offices, and at the Depot.

☞ Passenger Depot corner of Pearl and John streets, within a few squares of all the principal Hotels in the city.

ROBERT MEEK, Supt.

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '63. 1y. Letter Box, 1392. C. J. SCHULTZ, Pittsburgh, Pa.

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27-1y

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotives.

419 y 1

## KNOX & SHAIN,
## Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA.

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

## BUSH & LOBDELL.

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

Either Single or Double Plate,

With or without Axles.

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

Manner, at the Shortest, and on the

**Most Reasonable Terms.**

## Manufacturers, Importers & Dealers

—IN—

## RAILROAD, CAR,

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

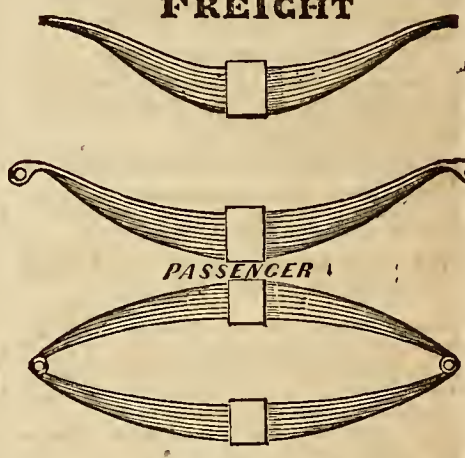
## MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

## RAILWAY SPRINGS.

**FREIGHT**




THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, an one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI, O.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

## W. M. F. HEWSON,
## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT.

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest. Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY

W. P. SMITH. *Master Transportation, Baltimor*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St. Louis and Cairo Depart. | Arrive. |
|---|---|
| Mail | 6:50 A. M 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run hy me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M Istreet

C. E FOLLETT,
General Ticket Agent.

W D. GRISWOLD neral Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis. at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



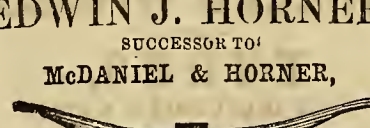
CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2 MOSELEY & CO.
BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

**THE SCHENECTADY**

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!!



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P. M. night.

On Sundays, 4.30 A. M.; 11.30 P. M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M. (Express.

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West

WM. TEARNE Supt.

# The Railroad Record.

E. D MANSFIELD, - - - } Editors
T. WRIGHTSON, - - - }

CINCINNATI:
THURSDAY, APRIL 6, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontintuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until tbey have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| *Little Miami—* | *Depart.* | *Arrive.* |
|---|---|---|
| Cincinnati Express | 6.00 A. M. | 7.30 P. M. |
| Mail | 9.00 A. M. | 8.15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11.30 A. M. |
| Morrow Accommodation | 6.20 P. M. | 8.00 A. M. |
| Night Express | 10.00 P. M. | 10.05 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky Mail | 7.00 A. M. | 5.45 P. M. |
| Dayton & Toledo | 7.00 A. M. | 9.45 P. M. |
| Cin. & Chicago Air Line Express | 7.00 A. M. | 9.45 P. M. |
| Dayton Accommodation | 2.20 P. M. | 5.45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5.00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7.00 P. M. | 12.35 P. M. |
| Hamilton Accommodation | 7.00 P. M. | 8.05 A. M. |
| do do | 10.00 A. M. | 6.45 A. M. |
| *Marietta & Cincinnati—* | | |
| Mail Express | 7.40 A. M. | 7.00 P. M. |
| Chillicothe Accommodation | 3.30 P. M. | 11.30 A. M. |
| *Ohio & Mississippi—* | | |
| Louisville, St. Louis and Cairo Mail | 7.00 A. M. | 11.30 P M. |
| St. Louis and Cairo Express | 6.00 P. M. | 5.00 A. M. |
| Louisville, St. Louis and Cairo Express | 7 40 P. M. | 8.20 A. M. |
| *Indianapolis & Cincinnati—* | | |
| St. Louis and Chicago Express | 6.30 A. M. | 11.00 A. M. |
| Mail | 1.00 P. M. | 5.00 P. M. |
| Night Express | 4.00 P. M. | 1,30 A. M. |
| Lawrenceburg Accommodation | 4.25 P. M. | 8.35 A. M. |
| Harrison Accommodation | 9.00 A. M. | 3.00 P. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Morning Express | 9.00 A. M. | 7.30 P. M. |
| Accommodation | 4.00 P. M. | 8.05 A M. |
| *Kentucky Central,—* (City time.) | | |
| First Train | 6.00 A. M. | 10.40 A. M. |
| Second Train | 2.00 P. M. | 6.00 P. M |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton. Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## CARRIAGE OF FREIGHT BY R. R.

AND THEIR PROFITS.

We have several times alluded to the great revolution of ideas, in regard to the carriage of freight, which had been forced on the minds of practical Engineers, by the experience of thirty years. In 1825 when the Liverpool and Manchester Road was opened,—the opinion of the the best Engineers in our own country was that Railroads would never carry freight profitably, except that of light parcels. This opinion was founded on what they supposed two imseparable facts: 1. That water carriage was the cheapest; and 2d. That, except on very low grades,—the carriage of heavy freight would be too expensive for the roads, by reason of wear and tear. But, they forgot that in many places there was no water carriage, and that where there was, the *gain of time*, by Railroad, counterbalanced in most articles, the cheapness of water carriage; and then there come in another fact,—that in winter time, most of the lakes and rivers are unnavigable, on account of ice. In regard to the expensiveness of grades,—or rather the power to overcome them,—this depended mostly on the power of the locomotives. If, that was great enough a grade of 250 feet to a mile may be overcome; but, it is true, that after about 50 feet, the wear and tear of the road becomes much greater. The experience of the *Baltimore and Ohio Road*, however, is that a Railroad may do a very profitable business, with very high grades. That road has a grade of 120 feet to a mile, for long distances. The experience of thirty years, on Railroads, in this country, has been steadily going to prove, that steam accomplishes the same work on land, that it does on water, with this difference, that on water, it has competition, in sail vessels, while on land it has none. *Steam* is the most potent power of commerce at human command, and it is no where put to greater advantage, than in Railroads. The conclusion of the whole matter is that, in the end, the great body of commerce, in freights, as well as persons, must be done by steam upon Railroads. This must eventually be specially the case, with the trade, between the Atlantic and Pacific Coasts. As yet, that trade is in its infancy; but it must be in a few years, gigantic. In the year 1863, the trade in vessels, between the Pacific and Atlantic, through San Francisco was:—

| | |
|---|---|
| Vessels | 102 |
| Tonnage | 114.962 tons. |

The total trade of San Francisco was:

| | |
|---|---|
| Vessels | 1,899 |
| Tonnage | 641,393 |

We allude to this incidentally, to show how fast the trade of the Pacific Coast is increasing, and the main channel of which trade must eventually be *over the Continent by Railroad.*

Let us now illustrate the business of Railroads in carrying freights, on the Internal lines, by showing the comparative carriage, by Railroad and by Water. We take from the report on the foreign and domestic commerce of the country, the following comparative facts.

The several great Railroad lines, therefore, carried an estimated value of freight eastward, across an assumed line of division between the west and the east, as follows:

| | |
|---|---|
| The New York Central | $168,030,400 |
| New York and Erie | 144,364,572 |
| Pennsylvania | 113,000,000 |
| Baltimore & O. (estimated) | 25,000,000 |
| Total, four roads | 450,304,972 |

With these total values of eastward freight by the great railroad lines should be connected the value of the eastward freight of the Erie canal, the details of which are given in subsequent tables. That value is officially stated by the auditor general for the year 1862 at $72,131,136 for "property coming from other States" alone. The way freight is not taken into account. The summary of values transported eastward thus becomes:

| | |
|---|---|
| By the four railroads | $450,304,972 |
| By the Erie Canal | 72,131,136 |
| Grand total | 522,526,108 |

The following is the calculation of freights carried by water, over all the great Lakes.

The calculation of eastward freights on the great lakes is given at length, and with the fulness which that most important trade demands, in the following separate section. From the statements of the total movement eastward, with which it closes, another estimate of values may be made, covering the business in flour and grain in 1862:

| | | |
|---|---|---|
| Flour | barrels 8,359 910, | value estimated $50,159,460 |
| Wheat | bushels 50 699.130, | value estimated 63,373,912 |
| Corn | bushels 32 985,922, | value estimated 16,492,961 |
| Other grain | bushels 10,844,939, | value estimated 5,422,470 |
| Total | | $135,448,803 |

It is difficult to make any further calculation on specific articles—provisions, metals, textile raw materials, or the very large value of animals.

We thus see, that if we put the whole water carriage of the Lakes and Canals together it is only *half* what the four central lines of Railroads carry. The supposed cheapness of water carriage has utterly failed to compete with the carriage of freights on Railroads. From these facts, a practical inference may be drawn,—that it is *improbable Railroad property should* (except in a few ill located roads,) *decline in value.* On the contrary,—as we have seen in the case of the Pennsylvania Central, and most of the Ohio Roads,—Railroads *must* increase in both business and profits. The reasons for this are quite obvious; and yet, do seem very plain to the Stock Exchange. Every Emigrant who goes to the West increases the quantity of products; and those products must go to market over the Railroads. Again,—with this increase of business, the Roads gradually clear off their debts and income bonds; and the cost becomes solid capital, and no more

margins have to be provided for; the profits go to the proprietors. In many roads now,—the business and profits are large, but most of the earnings must be paid to meet debts. That will soon cease,—and the continually enlarging profits of the company will be free to pay large dividends. The time is near at hand, when much of the Railroad Stock of the country, will be far above par. Railroads will eventually be as profitable as their projectors expected them to be.

## BRONZE COINAGE.

The Director of the Mint gives the following account of the bronze coinage; but thinks the near approach of peace will render it useless, by the introduction of silver:

"The substitution of the bronze alloy for the nickel mixture, as authorized by Congress, has been highly successful. The demand for the one and two cent pieces has been unprecedented, and every effort has been made to meet it. The demand still continues, although the number daily issued largely exceeds that of any former period. Large quantities are hoarded and thus kept from circulation. They have also been bought and sold by small brokers at a premium. This has induced individuals to collect them for the purpose of sale, thus producing a scarcity and inconvenience to the public that ought not to exist. The proportions of the three metals in the bronze alloy has been steadily maintained, as shown by the constant trials in the assay department, and regularly, as required by law, reported to me. The two-cent piece is a most convenient and popular coin. Its size and weight contribute to its usefulness. The motto—"In God we trust"—stamped upon this coin has been highly approved by the public, not only as improving the artistic beauty of the piece, but also expressive of our nation's reliance upon the "God of nations" in this hour of peril and danger. Why should this distinct and unequivocal recognition of the sovereignty of God, of Him who is "the King of kings and Lord of lords," be confined to our brouze coinage? The silver and the gold are His, and upon it should be impressed, by national anthority, the declaration of our nation's confidence and trust in Him "who maketh war to cease into the ends of the earth," and "who stilleth the raging of the sea and the tumult of the people." Let our nation in its coinage honor Him in whom is our strength and salvation.

ALUMINUM BRONZE.

During the past year some interesting experiments were made with aluminum as an alloy for coins; not with a view to displace the bronze coinage, but to propose a system of tokens for five and ten cents. More than two years ago experiments were made in aluminum alloys, to try their fitness for *medals*. Information was received from Paris that the introduction of only one per cent. of aluminum into fine silver would resist the sulphuretted tarnish which is so apt to attack that metal in certain exposures. The experiments made here did not confirm that statement; on the contrary, a slip of this alloy (99 silver, 1 aluminum) suffered more discoloration from the vapor of sulphuretted hydrogen than a slip of fine silver. The alloy was also much harder. An alloy of thirteen parts copper with one of aluminum was then tried, and another of nineteen parts copper to one of aluminum. The former gave a pale gold color, the latter the color of standard gold coin—both beautiful, but too nearly resembling that precious metal. Under the press, however, they were both found to be so hard and stubborn, in spite of repeated blows, as to be quite impracticable. The question, however, was still open, whether a different proportion, and the low relief used for *coin*, would not give a satisfactory result. In fact, we had specimens of aluminum bronze coinage, effected by European manufacturers of aluminum, which proved that the striking was at least practicable, if not easy.

THE IRON-WORKERS OF ENGLAND.—We copy from the *Railway Times* and *Iron Age* two paragraphs in relation to the present strike of the Iron Workers in England. It appears that a large body of the workmen in iron there are, and have been for some time, on a strike; and that neither they nor their employers are willing to give in. These papers suggest what seems to us a very good idea—to transport some thousands of those workmen to this country. It says the Emigrant Company are ready to do it and advance the money. In our opinion this is a most excellent plan for all parties. We want skilled labor and the workmen want better wages; and both will be had by this arrangement. The men would pay their way in a very short time; and if they did not choose to remain, they could go back after a while with cash in hand. It would be simply a means of equalizing labor and prices; and that, it seems to us, is much needed.

## INDIANA AND ILLINOIS CENTRAL RAILROAD.

This is a road proposed to be made from Decatur, Illinois, to Indianapolis, by which a great central route would be established from St. Joseph to Wheeling,—about 800 miles. It will unquestionably be a useful and important route, which ought to be made. The advantages of it are put forth in the following communication to the *Gazette:*

As an important and indispensable connecting link in a great thoroughfare for travel and the transportation of property, the Indiana and Illinois Central Railway has no competitor. The necessity for its immediate construction as a connecting link to serve present purposes, and to meet pressing wants, is very great, yet prospectively they cannot be overestimated. Let us briefly present some of the reasons in support of the above, and in favor of the early completion of the road.

First. The existing railroad facilities are not now equal to the wants of Central Illinois. The roads from Decatur were not, last fall, able to meet the pressing demand upon them. Those desiring to ship east were compelled to submit to the delays and exactions of the "Great Western," or else ship as best they could south to Pana, and thence eastwardly on the Terre Haute & Alton Road. Hence, much freight was not shipped east, which the holders would have preferred to have sent in that direction. Let the people of Illinois who may prefer to ship to LaFayette or to Toledo, avail themselves of the use of the Great Western, but let the connecting link between Decatur and Indianapolis be constructed, and thereby give additional railroad facilities, and a direct route to the East.

Second, The present necessities of Northern Kansas, of Southern Nebraska, of Central Missouri, of Central Illinois, and of Western Indiana, all demand the completion of this connecting link, to secure to them the shortest and most direct route to the East. Without the completion of the road from Decatur to Indianapolis they never can enjoy the best facilities for travel, or the shipment of produce, or merchandise from the Eastern markets.

Third, The character of the country through which the great central East and West route will pass, for salubrity of climate, for richness of soil, for timber, for stone, for water power, for minerals, and for everything necessary to invite and sustain a dense population, taken in its whole extent, from St. Joseph to Wheeling, is unequaled. The present wealth, activity and trade of the country, give the strongest possible guaranty, that the route will receive as much business as any road of equal extent in the country.

Fourth, When the connecting link is made, this route from St. Joseph to Wheeling will be about 790 miles in length; and for low grades, directness between intermediate and extreme points, and for actual straightness, will excel all other routes of equal extent in any part of the world.

To test the truth of this bold affirmation, let us give a few moments' attention to the facts, and first as to straightness. All the points on the route, excepting Wheeling, it is readily seen, are south of 40 degrees of north latitude. The precise latitude of most of the points is accurately given, and the residue are easily determined by examination, and are as follows:

| | |
|---|---|
| St. Joseph, about | 39.50 |
| Hannibal | 39.48 |
| Springfield | 39.48 |
| Decatur | 39.50 |
| Indianapolis | 39.46 |
| Dayton | 39.44 |
| Columbus | 39.57 |
| Zanesville | 39.57 |
| Wheeling | 40.07 |

Substantially, therefore, this route is straight.

As to the grade of this route, but little need be said to those familiar with the route through Missouri, Illinois, Indiana, and that portion of Ohio which is west of Zanesville. From Zanesville to Wheeling the grade is not higher than that usually found on roads over a hilly and mountainous district of country. Over seven hundred miles of the road is of exceeding low grade, while none of it has an objectionable grade.

Fifth. As a consequence of these undeniable advantages, this route must become the most important Eastern line of travel from the great West; its favorable centrality, it

low grade and straightness, connected with its other advantages, require that the link shall be speedly made.

These consideraitons are manifesting sufficient to invite railroad men to give their immediate attention to the most efficient means of completing the Indiana & Illinois Central Railway. If the central branch of the Pacific Road shall, in part or in whole, be completed, then the importance of this route will be greatly magnified, and the inducements for men of capital and enterprise will be largely augmented.

## LIABILITY OF R. R. COMPANIES

FOR LOSS OF PASSENGERS' BAGGAGE.

Although a railroad company is not responsible for injuries to the *persons* of passengers, unless they happen from the want of such care and diligence as is characteristic of cautious persons, yet they are liable for the *baggage* of passengers, at all events, except such losses as arise from inevitable accident or the enemies of the country, where no notice is given. (Camden R. R. and T. Co., *vs.* Burke 13 Wend., 611.) And they are thus liable although they do not receive any other compensation for the transportation of the baggage than that which is paid for the conveyance of the passenger. (Powell *vs.* Myers, 26 Wend., 591.) The passenger having been received on board is entitled to a safe keeping of his baggage, although he may not have paid his passage money.

In our case (36 Barb., 557,) the Court lays it down that the obligation of a railroad company is to take whatever is delivered and received as baggage, from a passenger in the baggage car of a passenger train in which the passenger takes his passage, and take it along with and deliver it to the passenger at the place of destination, in the usual manner of transporting and delivering baggage. And the obligation is the same, whether the baggage is within the quantity allowed to a passenger, to be carried without any charge other than the ordinary fare of the passenger; or whether it is extra quantity, for which the additional charge is made. If it be taken as the baggage of the passenger, whether ordinary or extra, it is to be carried with the passenger, unless there is some agreement to the contrary.

It is an elementary principle, therefore, that the carriers of passengers are liable as common carriers for their ordinary baggage, that is, they are liable for such baggage to the same extent as for freight; in other words, as insurers of the same. And it is considered that as railways have made their checks evidence in regard to the delivery of baggage, the possession of such check by a passenger is evidence against the company, of the receipt of the baggage. (*Redfield on Railways*, 243.) In one case the Court says "It stands in the place of a bill of lading." (Dill *vs*, Railway Company, 7 Rich., 158.) And where different railroads forming a continuous line run their cars over the whole line, and sell their tickets for the through route, and check baggage through, an action lies against either company for the loss of the baggage. (Hart. *vs.* Rensselaer and Saratoga Railroad Company, 4 Seld., 37.)

Where the company employs porters at their stations to convey a passenger's baggage to the car in which the passenger leaves the station of the company, their liability continues until it is so delivered, and it makes no difference whether the baggage be placed in the same car with the passenger or in the baggage car. (Richards *vs.* London, Brighton and S. C. R. R., 7 C. B., 839)

But if the passenger chooses to take the exclusive control of his own baggage, as a purse, or coat, cane or umbrella, for instance, the company is not ordinarily liable. But the liability having once attached by a delivery to the company's servant, they remain liable until a full and unequivocal re-delivery to the owner, and ordinarily to the end of the route.

Thus in a case where an emigrant passenger on a voyage from Liverpool to New York took the exclusive possession of his trunk, taking it into the steerage, placing it under his bed and fastening it to his berth by ropes, and during the voyage it was stolen, it was held that the owners of the ship were not liable. (Cohen *vs.* Frost, 2 Duer., 335.)

EXTENT OF RESPONSIBILITY.—WHAT IS "BAGGAGE?"

Railroad companies, as carriers of passengers are not liable for the loss of a package of merchandise which a passenger brings upon the train, packed as baggage, unless the company having an opportunity to inspect or know the contents of the package, see fit to accept it as baggage. A great number of cases have turned upon the definition or signification of "baggage;" thus the word has been held not to include a trunk containing valuable merchandise and nothing else, although it did not appear that the traveler had any other trunk with him; nor samples of merchandise carried to enable the passenger to make bargains. (Pardee *vs.* Drew, 25 Wend., 459; Hawkins *vs.* Hoffman, 6 Hill 586.) But where a passenger delivered a box containing embroideries, to the agent for receiving haggages, and demanded a check for the place of his destination, and was told that the company "did not check such goods," but that they would go safely, it was held that the company was liable for the loss of the box as common carriers, on the ground that there was no attempt to deceive them, or to have the parcel pass as baggage unless they consented, and if they consented to accept and carry it in a passenger train they were liable, and might charge freight the same as if they carried it upon their freight trains. (Butter *vs.* Hudson River Railroad Company, 3 E. D. Smith, 571.)

In one case the carrier was held responsible for articles of jewelry, carried among baggage, which was a part of female dress, the plaintiff traveling with his family, such articles being treated without question, as forming a part of the passenger's baggage. (Brooke *vs.* Pickwick, 4 Bing. 218.) So a watch carried in one's trunk is proper baggage. (4 E. D. Smith, 181.)

But railroads, as carriers of passengers, are not liable for money which they may carry as baggage, beyond a reasonable amount for traveling expenses. The passenger is allowed to take not only money sufficient to defray the ordinary expenses of the journey contemplated, but any reasonable sum in addition for such contingencies as are not improbable.

Thus, the distinction between baggage and freight has been pretty distinctly marked. And it must be remarked that an agreement to carry a passenger and his baggage includes only ordinary baggage, or such articles of necessity and personal convenience as are usually carried by passengers. It has, however, been held that guns for sporting purposes may be included in the baggage of a passenger from Europe to New York, for which the carrier is liable. (Van Horn *vs.* Kermit, 4 E. D. Smith, 453.) So tools used by the passenger in his trade, and also a gun, carried in his trunk, have been held proper by being included under the term "baggage," and recoverable as such. (Davis *vs.* Cayuga and Saratoga Railroad Co., 18 How., 330.) But a trunk containing silverware, carried as baggage without charge, from New York to Albany, was held not to be baggage for which the carrier was liable. The Court says "there is no difference between silverware and silver money." (Bell *vs.* Drew, 4 E. D. Smith, 59.) So a carrier is not liable for the value of a box of jewelry belonging to a third person packed in the passenger's trunk, the jewelry being put up as merchandise. (2 Bosw., 589.) Deception may as easily be effected by imposing upon the carrier valuable merchandise, under the guise of the owner's traveling baggage, as by a direct verbel misrepresentation.

It seems that books writing apparatus, and the like, which the passenger carries for his amusement or instruction by the way, may be included in the term baggage. (Hawkins *vs.* Hoffman 116 Hill, 586.) We are not aware that the question has ever been passed upon, but we do not doubt but books, manuscripts, scientific instruments and diplomas which a student has in his trunk on his journey to or from college or school, will be deemed baggage. It has however been held that presents for friends, masonic regalia and jewels, not being articles for the passenger's personal use or convenience, could not be recovered for as baggage. (4 Bosw. 225.)

DELIVERY TO THE PASSENGER.

The carrier must deliver the passenger's baggage to him at the place of destination, and the forgetfulness of the passenger is no excuse (Cole *vs.* Goodman 19 Wendell, 251.) Though, after the arrival at the place of destination, a reasonable time has elapsed for the passenger to remove his baggage, and he fails to do so, so that the carrier is no longer liable as a *common carrier*, he is not relieved from all care of the property, and all responsibility for its delivery, when demanded. He may notify the passenger to remove it, but if he does not take it away, the carrier is bound to preserve it *with ordinary* care, and, as a bailee, is chargeable, if it is lost through his negligence. (Van Horn *vs.* Kermit 4 E. D. Smith 453.) The carrier, therefore, is chargeable as a carrier, for the baggage of the passenger, only for a *reasonable time* after its arrival at its destination. His subsequent liability is not that of an insurer, but only that of a bailee, or warehouseman.

EFFECT OF NOTICES AND SPECIAL CONTRACTS.

It is settled, in this state, that a common carrier of property can not limit his liability, in part or in whole, by mere notice, even if the notice is brought home to the owner. Such notice is of no avail, unless the owner assents to its terms. (4 Bosw., 225.) Thus it was held in the case of the Camden Railroad and T. Co., against Burke (13 Wend., 611) that a notice that all baggage is at the risk of owners, although it is brought home to the owner, does not excuse the carrier from losses arising from the acts of himself or his servants, nor from actual negligence, nor the inefficiency of his machinery or vehicles, though it can not be discovered by the eye.

In the case of Welles against the N. Y. Central R. R. Co., (26 Barb., 641) the plaintiff received a free ticket from the defendants, entitling or permitting him to ride upon their cars at his own pleasure, with an indorsement on it, by which "he expressly agreed that the company should not be liable, under any cir-

cnmstances, whether of negligence of their agents or otherwise, for any injury to his person or for any loss or injury to his property." The court held that this contract was not uulawful. It is fully hinding to the extent of exemoting the defendants from all loss or liahility to loss or damage from injuries resulting from mere negligence of any degree. And therefore, under an express contract that the goods are to be carried, "at the risk of the owner," the carrier iucurs only the liability of an ordinary hailee (4 Seld., 375).

UNCLAIMED BAGGAGE.

It is provided hy statnte, in this state, similar to that in other states, that carriers, having on hand any unclaimed baggage, must enter it in a book to be kept for that purpose. If unclaimed for thirty days, the description of the goods must he published in the State paper on the first Mondays of July, October, January and April in each year, once a week for three weeks. If not claimed for sixty days, the goods are to he opened and an inventory to he made, and if unclaimed for three months after such examination, they are to be sold at public auction, giving six days previous notice of the time and place of the sale. The net proceeds of the sale, after paying expenses and charges, is to be paid to the overseers of the poor of the town or city where the sale is made.

ARTICLES LEFT IN CARS.

It not unfrequently happens, that passengers in the hurry of leaving a train neglect to take with them such articles as an umbrella, a coat or satchel. For the safety of these articles, which the passenger has assumed to care for himself, the company, as we have seen, are not responsible. But we helieve it is always customary for one of the servants of the company to pass through the train and collect such articles as have been inadvertently left, and deposit them at the depot for reclamation hy the owners. But by thus assuming to take charge of these articles, the company assumes a certain responsihility. If it should dcliver an article thus found to the wrong person, without taking care to ascertain who was the owuer, it would be liable. But in general, no extraordinary care will be exacted of the company in such a case. It is not a case where property is put into its hands by the owner, hut it comes into its possession by the owner's own neglect; and when the carrier does not know to whom it belongs, or hy whom it was left, he should not be held responsible for delivering it to a wrong person if he has exercised all the care and vigilance that could reasonahly he expected from him, under the circumstances.

## THE IRON-WORKERS' STRIKE IN ENGLAND.

The contest now existing between the iron-masters and their workmen in North Staffordshire, England, is rather a serious matter. It prevents the supply of orders to the extent of more than 50,000 tons of iron per week, according to the London *Mining Journal*, and both the manufacturers and the workmen seem determined to carry their point. The masters are equally determined with the men and have formed a "Union," and the *Mining Journal* says that the masters have no alternative hut to combine and resist every strike, whether local or general, even to closing all the works in the kingdom.

Quite a large share of the products of the lahor of the workmen were sent to the United States, but as circumstances have, in some degree, closed this market, the surplus of lahor and iron leads to a diminution of wages. Now it would be vastly better for these workmen to come to this country, where their products have been hitherto sent, and where wages for skilled lahor are vastly higher than in Great Britain and will continue to he higher for the next generation. We need their skilful labor and they need our money. The producers and consumers of iron ought not to be divided by three thousand miles of distance; it would he better for each that they stood upon the same soil. There is room enough and work and good wages enough in this country for all the miners, machinists, and iron-workers of North Staffordshire, even should they come in a body. We have 30 000 miles of railway, and very soon seven or eight thousand miles of it in the Southern States have got to be reconstructed and equipped. There are three lines of railway yet to he constructed to the Pacific coast, averaging at least 2000 miles each, or six thousand miles in all. We have iron ore beds and coal beds in such quantities as almost to defy helief, and what we most need is skilled men to work them. We trust every effort will be made to inform these workmen truly of the better prospects they have here for their skill than they can ever have in England. Both that country and this would be benefited hy a large number of their workmen coming here; they have a surplus of labor, we have not; there the workmen harely get wages enough to enahle them to live; here they may hecome independent and even rich. Perhaps the emigration of several thousand iron workers here might interfere somewhat with the long estahlished policy of the English iron-masters, to keep this country as a market for their wares; but it would he no great hardship to these enterprising gentlemen if they should leave their particular claim in that respect in aheyance for a while.—*Railway Times.*

## SOBER WORD TO THE IRON TRADE.

Seventy thousand British iron workers are to-day idle! At the present rate of sterling exchange five thousand of these men could be transported to New York by sailing ship for *one hundred and fifty thousand dollars*, which would he repaid in less than four months by the immigrants themselves.

The effect upon the iron masters in England of such a movement would be very marked. *They*, if they saw their American competitors were playing this game in earnest, would, in self-defense, at once raise the wages of their men, and so increase the cost of production, and thus diminish the force of their competition; or, if they did not do so, the volume of of labor would flow to this country until its price here was equalized with that in England, which would be done rather by raising the English than depressing the American rate.

Two thousand Swedish Norwegian miuers, thrifty, lahorious men, and well skilled miners, are candidates for employment in this country. They prove the most desirable citizens and the most productive workers. They will repay the money advanced for their importation within three months out of the proceeds of their lahor. The American Emigrant Company are ready to accomplish the immigration of these five thousand British iron workers, and two thousand Swedish miners during the next four months.

Let us impress upon manufacturers the importance of attending to this proposal. The supply of labor, of skilled labor, is one thing needed for this country, and *employers cannot have to much* of it. But besides this we must remind the iron trade of the country that the contingency of European war is not impossible, and if that should come the immigration of skilled lahorers would of course cease at once.—*Iron Age.*

## LAWS APPLYING TO TRAVEL.

The law that governs the relations of railroad companies to the puhlic as common carriers is so imperfectly understood that honest meaning men are often led into litigation, who have not had the least grounnd on which to sustain a valid claim for damages caused by the company or its agents. Some leading points are therefore given, as proper in a publication of this character.

RIGHTS OF THE RAILROAD COMPANY.

The right to make and enforce rules for its own protection, among which are regulations as to the conduct of passengers; such rules must not he conflict with common law or special enactments.

A company can not be held for damages resulting from passengers standing upon the platforms, or the putting of any portion of the body out of the windows; such conduct heing against the rules of all railroad companies.

As a general rnle, a company can not he held for any accident resulting from an attempt to get on or off a car while in motion. If, however, passengers should leap from a car under the influence of a well founded fear of a collision, the company is liable; so, too, passengers are entitled to a reasonable time to get on or off at stations; and if while getting on or off, the train starts and a passenger is injured therehy, the company is liahle; but again, if a passenger, being carried past the station where he desires to stop, jumps off without waiting for the train to stop, he does so at his own risk, the company not heing liable for his imprudence; for "if a passenger is negligently carried heyond the station where he intended to stop, and had a right to be let off, he can recover compensation for the inconvenience, hecause these are direct consequences of the wrong done him."

A company is liahle for injuries to a regnlar passenger, though riding at the time on a baggage car, or even on a locomotive or tender, where those injuries are caused hy the negligence of the company or its agents. But an individual riding free upon an engine, baggage car, freight or passenger train, by invitation of any of the persons working the train, except the conductor, can not recover from the company for injuries he may sustain; train hands having no right to permit any one to ride on any part of the train either free or for pay.

If a company choose to carry passengers for a specified time at a reduced rate, as dnring excursions, the tickets being good only for a certain time, passengers are required to conform to that time, and tickets presented afterwards can be lawfully refused, as the contract has not heen conformed to on the part of the passenger.

LOSS OF LIFE OR INJURY TO PERSON.

1st. If caused hy a collision with any train, or any obstacle placed upon the road by the company's agents, or left there by their negligence. If, however, a collisiou occurred from crossing the road, the engineer having given fair warning at the distance regulated by law and custom, action for damages will not hold,

nor can recovery he had where the accident is caused by cattle straying upon the road, or from obstructions placed upon the road by malicious persons, provided it appear in such cases that the servants of the company engaged in running the train did all in their power to avoid the accident.

2d If death or injury is caused by the breaking of a bridge; if, however, it is in proof and clearly established that the timhers of the hridge have heen tampered with, or removed hy milicious persons, the company is not liable, unless it also appear that hy the exercise of proper care and diligence on the part of the company, the danger migbt have been discovered in time to prevent the accident.

3d. Where death or injury have resulted from a car running off the track, hy the breaking of a car axle, or hy the explosion of a locomotive, unless the company in such cases make it appear that the accident resulted from causes which human care and foresight could not have prevented.

4th. A company is liable for death or injury under any circumstances where it has resulted from the negligence of the company or its employees; and whenever such injury to a passenger has occurred, the burden of proof is on the company to sbow that tbere has heen no neglect of its duty, and that the damage has resulted from a cause which human care and foresight could not prevent. The company must he guilty of no negligence, either in regard to the construction of its engines, cars or track, or the management of them, if it would escape liability for accidents.

OF THOSE WORKING A TRAIN.

A conductor of a train has absolute control over it, and is the superior officer of all engaged in working the train.

A conductor has a right to demand a sight of his ticket from any passenger as often as may be reasonably necessary to satisfy himself that such passenger has paid his fare; hut he has no right to make such demands for the purpose of annoying.

A conductor has a right to put any passenger off a train for drunkeness, obscenity or acting in any disorderly manner whether such individual has paid his fare or not.

A conductor has a right to put off a train any individual who trespasses any proper rule laid down for the safety of passengers, or the protection of the company, such as standing on the platform, interfering witb the hell ropes or car hrakes, etc., etc.

Where passengers are put off the cars for violation of rules, or for other causes, justifiable in law or railroad usage, care must he taken tbat the cars have stopped, otherwise a company is liable, if damages result to the person ejected, from the motion of the cars.

A company has also a right to discriminate between those who pay their passage on the cars or purchase tickets at the company's office, and the conductor may eject from the cars any individual, who, in paying bis passage on the cars, resists the payment of such additional charge per mile as the company may have seen proper to impose in such cases.

A conductor has no right to deprive a man of a seat which he has taken, and it is presumed paid for, not even for the accommodation of a lady.

It is the duty of railroad companies to supply cars in sufficient numbers and capacity to accommodate the traveling public on all ordinary occasions, so that each passenger may have a comfortable seat; and if a passenger has paid or offers to pay his fare, the company is bound to provide a seat for him, unless the number of passengers is increased by some extraordinary event, beyond the reasonable limit of the company's means of conveyance.

The duty of the brakeman is to attend to the hrakes, and he should not he importuned with questions.

The place of duty of the baggage master is in the baggage car. Ordinarily, he has no right to give out baggage unless a check is presented; but if he knows that such haggage is the property of the person applying for it, he may do so with safety. In case of any uncertainty in regard to the ownership, he should require most satisfactory proof. If such proof he given and he still refuses to deliver the haggage on the ground that the owner is not able to produce the cheek, tbe company will be liable. He must bandle all baggage with ordinary care, or the company is liable for damages for carelessness.

INJURY TO PERSONAL PROPERTY.

No damages can be claimed from a company for the accidental destruction of cattle upon its track, where the charter of the company or special enactments do not bind it to fence its track. The track is tbe exclusive property of the company, and cattle found thereon may be taken up as estrays.

All the haggage entrusted to tbe company's agents must, if lost, be paid for by the company; but it is incumbent upon the passenger to use all due diligence in getting and retaining proper proofs of its delivery; and where a company gives *checks* for the haggage entrusted to its agents, the passenger must attend to getting his baggage checked, and retain the duplicate checks. If he loses the duplicate check and it is found by another party, who gets the haggage, an action will not lie against the company *for the wrong delivery*, unless the owner of the haggage notifies the proper agents of the company of the loss of the check, before tbe baggage is delivered thereon. A reasonable time must be given to the company to make scarch for lost baggage. The owner of the baggage is a competent witness to prove the contents, but not their value.

It is against the rules of all companies to take baggage into passenger cars, although it is done constantly by sufferance. Such baggage is considered as remaining in the actual possession of the owner, and at his risk, so far as loss from theft, mistake or like casualty is concerned; and companies are not obliged to make any exertion to recover such baggage when lost or stolen; hut if it is destroyed hy a collision, for instance, or other similar cause, produced hy negligence of the company's agents, the owner may recover damages.

Companies are not liable for valuable trunks of jewelry, money or merchandise, unless special terms are made by the owner with the company or its agents; the liability of companies for lost haggage being simply for such wearing apparel, books and other articles, as are necessary for the journey But the personal ornaments of a passenger are classed with the wearing apparel, although they may be of great value, as a diamond necklace, for instance, and money in sufficient amount for the reasonable expenses of the journey is included among the necessary articles of traveling expenses.

A company is liable for damages to haggage resulting from any want of ordinary care in tbe bandling of it hy the company's servants.

CONCERNING TICKETS.

Always purchase your tickets at the office before entering the car. You will save trouble and additional fare charged on most roads. It has been decided that where a ticket is sold, good for a specified time, at a rate lower than that charged for those permanently good, the reduction in fare is a valid legal consideration, and the ticket can not be used after the time expires.

A case was decided by Judge R. P. Marion, of the 8th District Cattaraugus Circuit in New York, in which the ticket was "good for three days," and "for a continuous trip only," in which the party got off; waited for another train, seven days after, was charged fare, refused to pay, and was ejected from the train. Action for assault and battery was non-suited, because of special terms of contract. Passengers who lose or mislay their tickets can be made to pay a secoud time—decided in a case before Judge Foote. Children hetween four and twelve years are usually charged half price.

CONCERNING BAGGAGE.

Take as little baggage as possible. Unless going to stay at your destination for a length of time, a carpet bag or valise will hold all you want, except your sbawl, overcoat or umbrella. Baggage beyond what you can conveniently carry yourself is a constant expense. Railroads confine their legal responsibility for loss or damage to $100. Always check your haggage to the end of your journey if possible, thereby relieving yourself of all responsibility and care, and saving yourself hurry and worry when a change of cars occurs.

A railroad company is not liable to a passenger for the loss of his haggage, caused hy the public enemy or by inevitable accident.

## INDIAN RAILWAYS.

The very interesting report of Mr. Julian Danvers, the Government director of Indian railways, to which we have referred on several previous occasions, gives some curious statistics regardng the cost and management of the great iron highroads which are now rapidly spreading into all parts of our vast European Empire. To what extent European capital and enterprise is involved in the mighty undertaking of establishing the most perfect means of locomotion in a country which up to the present has been without almost any means of intercommunication; in a country, moreover, where humanity is split up into the smallest fragments hy the narrow rules of of caste, with immense barriers between the various classes of society—how great the material stake which England has in this Hercules work of civilization—is strikingly shown in Mr. Danvers' figures. His report tells us that during the single year ending 1862, arrived in India 407 ships, carrying 182,621 tons of materials for the various railway companies, of the value of £1,669,445. Such a fleet of 407 ships represents the commerce of the whole civilized globe of but a few centuries ago And this is only the activity of one year. To carry the whole of tbe material used for the construction of railways in India no less than 3,012 ships were employed—a fleet considerably larger than the usual navies of Belgium and the Netherlands put together. It is sad to add that thirty-nine vessels out of these 3,012 were lost on the road to India. The loss must be numbered among the many sacrifices which Great Britain has made to spread civilization among the 136 millions of dusky Asiatics subject to her sway.

The total length of all the Indian railways at present, amounts to about 2,000 miles, and

adding the lines in course of construction, to very nearly 5,000. It appears that, notwithstanding exceeding low fares of which anon, the financial state of most of the companies is very satisfactory. Even so late as the year 1861 the belief was general in India, that the great companies would not be able to carry out their undertakings without assistance from the Government; but this fear was dispelled by the results of the year 1861–'62. A great and general increase in the receipts for goods and passengers had for immediate result, that capital came flowing in freely, so that, although large sums were required for the new lines, there was no lack of money.

Yet the expenditure in this one year, 1861–'62, was enormous; the East India Company paid away the largest sum during the twelve months—over two and a quarter millions sterling. The Great Indian Peninsular came next, its outlay having been above a million and a half. The Punjaub spent £312,966; the Eastern Bengal, £440,650; the Scinde, £169,218. Mr. Danvers estimates that no less a sum than 57½ millions will be required to finish the railways already commenced, adding, "I wish to guard myself against encouraging the expectation that this sum may not be exceeded. Past experience would unfortunately lead to the impression that very likely it will." *Tout comme chez nous*, we may be allowed to say.

The Indian railway budget, at the time the report was prepared, was very heavy as well as complicated; but we may put it conveniently in the form of a table, as follows:

| | |
|---|---|
| Estimated cost of works | £57,500,000 |
| Amount guaranteed | 23.500,000 |
| Amount raised | 43,000,000 |
| Amount expended | 40,600,000 |

When a double line of rails is substituted for the single line at present in use in many parts of India, the expenditure will, of course, be very largely increased. But a double line is absolutely necessary on most, if not all, Indian railways, for already the old system gives rise to very serious inconveniences.

It is exceedingly satisfactory to find that the natives of India make not only good railway servants, but first-rate engineers. It is stated in Mr. Danvers' report that ninety-four per cent. of the persons employed on Indian railways are natives, and that, on the whole, they do their work remarkably well. To reduce the per centage of European labor still further would be clearly to the advantage of shareholders, if not of managers. "That European supervision," says Mr. Danvers, "will be necessary can not be doubted; but that much of the mechanical skill and sedentary work, and all the common labor bestowed upon the works, should be obtained in the country is equally obvious." The ease with which natives are trained is commented upon by Mr. Stokes, the locomotive superintendent of the East Indian Railway, who says: "After a sufficient staff has been sent out from England for the first two or three years working at a new line of railway in India, the resources of the country may be depended upon for securing an abundant supply of engine men, if a practical system of instruction be adopted." Whether, when this system is pushed to its full length, accidents might not become more numerous, no opinion is given. It ought to be said, however, that at present the rate of accidents on Indian railways is rather high. Out of four and a quarter millions passengers carried in 1860, there are fifty-one killed and forty-four injured. In Germany, where the trains run at about the same speed as in India, the proportion of casualties last year was not more than one in six millions; but, undoubtly, the railway system in our Great Eastern Empire is in its infancy, and, on the whole, the plan of employing native labor seems to answer very fairly. It is quite clear, besides, that without such labor, Indian railways could never have been developed to their present magnitude; nor would it be possible in its failure to complete the great iron network over an empire of near a million square miles, with a population of 136 millions.

One of the most gratifying features in connection with Indian railways is that they are used by the lowest as well as the highest classes of the natives, and that the former, in particular employ the new means of traveling very extensively, as soon as the fares come within their reach. The Great Indian Peninsular Railway increased the number of its passengers half a million in six months, by introducing a fourth class at lower rates. Below the point fixed by this company—namely, a fifth of a penny per mile—Mr. Danvers thinks it would be imprudent to go; but there are those who advocate a still lower scale, on financial as well as on political and moral grounds. It is clear that curious experiments may be made in India, as to what really are the lowest charges at which great numbers of passengers may be carried over vast distances. Packed up in gigantic carriages two stories high, without expansion cushions and bolsters, glass windows, and scientific ventilation, and with greatly simplified modes for issuing and taking tickets—one of the most cumbrous, troublesome and unreasonable features of our European system—there seems no reason, indeed, why human beings should not be carried very much at the same rate as goods. Indeed, goods have to be carted up to the station at the expense of the companies; have to be hoisted into the carriages, and to be guarded, registered, and often insured against danger; while passengers do all this work for themselves, requiring nothing but the allowance of a limited space in the moving train. The final experiment as to the lowest rates possible of railway locomotion—lower even than "a fifth of a penny per mile" seems to be about taking place in India, and its success must create a social revolution. The revolution, in fact, has already commenced. The six or seven millions of Hindooes, Mahometans, Parsees, and other creeds, tribes, and races, whom the railway, and the railway alone, brings into contact annually, are but so many emissaries of European society, and so many disciples of western progress. What the sword has been unable to do, and what even missionary enterprise has failed to accomplish, the iron highroad is about to undertake—to free India from the curse of caste and bind it in strong, because interested, bonds, to our own country. In this sense, the three thousand ships with railway stores, and the fifty millions of capital which we have sent to India, are the noblest contribution Great Britain has ever made to the cause of civilization.—*Railway News.*

---

"ILE."—*Tallow* is said to have been struck in Windsor, Hartford County, Ct. *The Times* says: "In the town of Windsor, on Mr. James Harvey's land, five miles from Hartford, is a spring, on the waters of which, when pounded, rises a coating of tallow, about three-eighths of an inch in thickness. It resembles and will burn like beef or mutton tallow. Near by this spring, on Mr. Halsey's land, lumps of clear tallow have been dug, We have a small specimen of it in our office. It has been long known that sea-wax or tallow, as well as oil is found imbedded in the earth."

## AMERICAN EXPRESS BUSINESS AND ITS ORIGIN.

BY HENRY WELLS, ESQ.

The Express system is due, in its origin, to American ingenuity; in its development to American enterprise; in its almost perfect organization, to American business tact and sagacity; and the confidence of the community in it has been secured by the much-tried yet never-failing integrity of its managers. And wondrous as is the rapidity with which the primeval forests of this wide country have been cleared, and thriving cities, towns, and villages established on spots where, but a few years since, only the wigwam of the Indian, the log hut of the pioneer, or the den of the wild beast could be found; marvelous as is the extent to which railroads have been constructed through vast tracts where, within the memory of men yet in their prime, only the lone hunter or the intending settler wended his way; exhaustless as appears the fertility of American inventiveness; proud as Americans may justly be of their Fulton, Morse, and Ericsson—I think that untiring perseverance and unflagging energy, triumphing over seemingly insuperable obstacles; unflinching endurance of hardships, exposure and fatigue; fidelity to trust reposed; sagacity to forsee, tact to provide for a public want—all of which have been exhibited to a remarkable degree in the establishment and management of the express business—entitle its founders and conductors to no smaller a meed of praise than is awarded to the pioneers of our settlements, the constructors of our railroads, the inventors of our telegraphs, our steamboats, our iron-clads, and our almost numberless labor saving and wealth producing machines.

As I frequently use the term, "Express system," it may be well for me to explain here that the expression is *properly* applicable only to the method according to which the express business is done in New York, the Middle, at one time the Southern and Western States. In the Eastern States generally the express business is carried on by a large number of local expresses running only between certain, not far distant, termini, and each independent of all others. It is impossible to give even an estimate of the number of these. No less than 130 minor expresses run from *only three* offices in Boston. In New York, as the commercial metropolis of the Western Hemisphere, facilities of communication with all parts of the continent and the immense amount of constantly augmenting business, necessitated the establishment of associations which could, by their capital, guarantee the public against losses, and by systematized labor furnish the required accommodations more economically and effectively than individuals or ordinary business firms could do. Such associations have accordingly been formed under the laws of the State of New York, regulating the organization of joint stock companies, with capitals varying from $250,000 to $3,000,000.

It can scarcely be necessary to say that the present immense extent of express business was probably not even dreamed of when the first step was taken which led to it. "Great oaks from little acorns grow," and "the day of small things was not to be despised." The force of these saying was never better illustrated than in the rapid and prosperous growth of the "Express" from a *very* small beginning.

When William F. Harnden, seeking some active employment which would release him from the close confinement imposed by his

duties in the office of the Boston and Worcester Railroad, undertook, in 1839, to establish a "package express" between Boston and New York, he, probably, only contemplated such a business as would provide a remunerative income and congenial employment for himself. The feasibility of such an enterprise was, it is not improbable, suggested by the fact that the stage drivers on the various roads out from Boston were in the habit of carrying and delivering small parcels, and of executing such commissions as were intrusted to them. These stage drivers, many of whom were proprietors in part or wholly of the stock needed in their business, were ordinarily trustworthy and responsible men, to whose charge valuable packages could be safely committed. When railroads began to be constructed, the conductors, many of whom had been drivers on the stages which were superseded by the railways, still continued to receive and deliver parcels and orders, and the clerks of the various lines of steamboats executed like commissions. The packages intrusted to them, they delivered at the offices of their respective companies, or through such channels as might be conveniently accessible; but as this business was only supplementary to their main occupation, they could not give it the attention necessary to its enlargement, or even to its satisfactory discharge in all cases; and probably three or four times as many packages as were conveyed by them were transmitted by the hands of private individuals, who undertook, often very much against their inclination, the charge of delivering them to the parties to whom they were addressed.

Harnden's enterprise was not at first so successful as to recompense or encourage him. It is asserted, indeed, that he was thinking of abandoning it, when the establishment of the Cunard line of steamers between Boston and Liverpool caused such an increase in the number of parcels from and to New York as to render him very great assistance, and to stimulate him to continue and extend the business he had begun. In 1840, he resolved upon an extension of his route to Philadelphia. In 1841, he undertook, in connection with Dexter Brigham, Jr., of Westboro, Mass., to establish a foreign express to convey packages and parcels to Liverpool, London, and Paris, which, not having proved very successful, was discontinued in a short time. Early in the same year, being encouraged by the prospects of his extension to Philadelphia, he resolved to run an express on the Hudson river from New York to Albany, but failing in his endeavors to secure the co-operation of the steamboat captains, who derived considerable emoluments from the conveyance of parcels and packages, and, consequently did not feel disposed to favor his enterprise, he made his difficulties known to me, and I undertook to arrange matters for him. This I was enabled to do through my acquaintance with Daniel Drew and others, and I undertook the Albany agency. Harnden's object, in establishing this agency, was to gain the control of the express business between Boston, New York and Albany, which formed, as it were, the apices of a triangle, the several sides of which were the Boston and Providence Railroad and the steamboat line connecting Boston and New York; the Hudson river connecting New York and Albany; and the Western Railroad, then in progress, connecting, Albany and Boston.

Shortly after commencing my duties as agent at Albany, I suggested to Harnden the expediency of running an express to Buffalo, and, as facilities of transportation would permit, to Chicago and the "Far West;" but he had so little faith in the feasibility or success of such an enterprise that his answer to my proposition was: "If *you* choose to run an express to the Rocky Mountains, you had better do it on your own account; *I* choose to run an express where there is business."

Previous to Harnden's death in 1845, the express business between Boston and Albany had become the property of James M. Thompson, who, in 1851, in connection with Johnston, Livingston and others, determined on extending the business to New Orleans, Mobile and Texas. In 1854, this company was consolidated with several others, running from Boston to New York, into one joint stock association, under the title of "Adams & Co.'s Express", though it continued to have its own routes and offices the same as before the consolidation.

Harnden's enterprise was not carried to a successful issue without competition. In 1840, Alvin Adams and P. B. Burke, started an opposition express, under the name of Burke & Co. As the business did not promise to be speedily remunerative, Burke soon retired; but Adams (who in 1841–2 associated with himself as partner, W. B. Dinsmore) persisted, in the face of much opposition and of the general depression of the mercantile and industrial interests of the country at that time, in continuing a business in the eventual success of which he felt full confidence. The business of Adams & Co.'s Express was at first restricted to New York, Norwich, Worcester and Boston; but the stimulus given to trade and emigration by the discovery of the gold mines of California led to the establishment, in 1849, of a California express. In 1850, up to the time the express business had not been generally extended to the Southern States, a line to Mobile, New Orleans, and the far Southern and Southwestern States was commenced by John K. and A. L. Stimson. In 1852, this line was amalgamated with Adams & Co.'s.

In the same year Adams & Co. projected a line of express to Australia, and sent thither an agent to open an office; but want of regular and reliable communication caused its early abandonment.

Shortly after, Adams & Co. established an express from Philadelphia to St. Louis through Pittsburgh.

In 1854, Adams & Co.'s Express was consolidated with Harnden's, Kinsley & Co.'s, and Hoey & Co.'s Charleston Expresses, and in the same year the California connection was abandoned by them. In 1855, "The Adams Express Company" (which was the designation now assumed by this association) commenced running from Charleston to Columbia, S. C., Montgomery, Ala., Atlauta and Augusta, Ga., and Nashville, Tenn.; and at the outbreak of the rebellion, had entire control of the express business in the Southern and the Southwestern States. Since that time, their operations in this direction have been restricted to the Border States and the coast. The main lines of their traffic are now over the Camden and Amboy, and New Jersey Railroads, to Philadelphia; the Pennsylvania Central and its connections through Pennsylvania; and to Cincinnati, Louisville, St. Louis, and intermediate points.—*R. R. Gazette.*

---

What Strikes Lead To.—The iron workers of North Staffordshire have struck work rather than submit to a reduction of ten per cent. of their pay, in consequence of which the iron masters of England have formed a national association and decided to stop work everywhere if the North Staffordshire men hold out. In that case 70,000 men will be thrown out of employment.

## AN ASSOCIATION

### FOR THE PREVENTION OF BOILER EXPLOSION.

We have recently conversed with an engineer and inventor of merit, who intends to work for the institution of an association like the Manchester Association for the Prevention of Boiler Explosion; its field of operation to be New York and its vicinity. Of the need of such an association there are not many who doubt; but of its utility and importance, we apprehend, few have an adequate comprehension; it may therefore be well-timed to give a brief account of the Manchester Association, which we abridge from the *Practical Mechanics' Journal* for February last.

This association was founded in 1854. Its objects were:—1st, to prevent boiler explosions; 2d, to assist all who use steam-power to use it most economically; and, 3d, to render unnecessary legislative interference with the use of steam, which cannot fail to embarrass the steam user. The system of voluntary boiler inspection, inaugurated by this association, has now worked ten years, with advantage and satisfaction to steam users; and its efficiency for the prevention of explosions is generally admitted. Its investigations of the explosions of the boilers not under its inspection have shown that, as a rule, explosions are neither accidental nor mysterious; but may be prevented by common knowledge and care.

It is now felt that the second object, economy in the use of steam, should be more vigorously prosecuted, since there are many points the investigation of which would be useful to the members. Thus: much uncertainty exists as to the results of the system of compounding engines, which the requirements of this district have called into existence, and in which capital is too often invested unprofitably. And there is equal uncertainty about the economy of different forms of boilers, of steam-jackets, of superheating, of heating feed-water, and many other questions.

After ten years' successful working, which has been approved by the institution of several associations on the same plan in different parts of the country, it is considered that this association has become a national engineering institution. And it is felt that it may now take a step in advance, and engraft upon the system of periodical inspection the principle of pecuniary guaranty. It is proposed to guarantee each boiler that is inspected and approved, up to £300; and to pay all damages to the boiler and surrounding property, up to the amount, in case of explosion. To enable the association to carry out its new plans, the annual payment on each boiler is raised from a guinea to a guinea and a half; and to encourage members to pay the additional half-guinea, the president and executive committee have indorsed the guaranty fund to the extent of £1,000 each, making £10,000 in addition to the ordinary payments, out of which to pay losses.

In adopting this principle of guaranty, the association takes precautions against the negligence of boiler proprietors; it will not pay for a burnt crown sheet that evidently has resulted from low water; but it will pay for whatever results from weakness.

It is probable that boilers thus inspected and partially insured by an association of men who know something of boilers, and who have inspectors of known ability, will be deemed less hazardous by insurance companies, who will insure the buildings near them at lower rates than the present.

In the commencement of such an association, we presume that inspection, and investigations of improved boilers and apparatus, will be the chief objects; and that insurance will not be undertaken until the association is well founded. Probably, however, insurance companies may act in aid, when insurance is desired.

## PASSENGER RAILWAY TABLE OF PHILADELPHIA.

STOCK AND DEBT AND DIVIDEND.

| NAME OF COMPANY. | Total am't now paid in of capital stock..... | Total am't now of floating & funded debt. | Rate per cent. on funded debt. | Rate per cent of dividend |
|---|---|---|---|---|
| Citizens', Pittsburg..... | $100,000 00 | $77,556 71 | 7 | 8 |
| Citizens', Philadelphia..... | 192,750 00 | none. | ... | 8½ |
| Delaware County, Philadelphia..... | 23,760 00 | 9,539 75 | 7 | no d. |
| Frankford and Southwark, Philadelphia..... | 490 530 00 | 218,500 00 | 7 | 8 |
| Fairmount, Philadelphia..... | ..... | unknown. | ... | none. |
| Fairmount and Arch Street, Philadelphia..... | 200,000 00 | 27,895 33 | 7 | 7⅜ |
| Green and Coates Street, Philadelphia..... | 150,000 00 | 98,000 10 | 7 | 6.20 |
| Germantown, Philadelphia..... | 112,245 00 | 250,000 00 | 7 | none. |
| Girard College, Philadelphia..... | 160,000 00 | ..... | ... | 4 |
| Hestonville, Mantua and Fairmount, Philadelphia..... | ..... | 75,000 00 | 7 | none. |
| Lombard and South Street, Philadelphia..... | 90,000 00 | ..... | ... | none. |
| Oakland, Pittsburg..... | ..... | 39,963 80 | 7 | none. |
| Pittsburg, Allegheny and Manchester..... | 75,000 00 | 27,968 65 | 7 | none. |
| Pittsburg and Birmingham, Pittsburg..... | 48,000 00 | 135,000 00 | 6 | 8 |
| Philadelphia City, Philadelphia..... | 110,000 00 | 17,000 00 | 6 | 9 |
| Philadelphia and Darby, Philadelphia..... | 101,000 00 | 15,500 00 | 7 | 6 |
| Philadelphia and Gray's Ferry, Philadelphia..... | 159 312 00 | ..... | ... | none. |
| Ridge Avenue and Manayunk, Philadelphia..... | 150,000 00 | 172,000 00 | 7 | none. |
| Second and Third Streets, Philadelphia..... | 208,757 25 | done. | ... | 10 |
| Seventeenth and Nineteenth Streets, Philadelphia..... | 120,000 00 | 2,000 00 | 7 | 5 |
| Thirteenth and Fifteenth Streets, Philadelphia..... | uncertain. | ..... | ... | 5 |
| West Philadelphia, Philadelphia..... | 949,100 00 | 110,000 00 | 7 | 10 |
| | 2,694,474 25 | 1,376,217 24 | | |

## UNDERGROUND RAILWAYS IN LONDON.

The *Mechanics' Magazine* (whose article we should be glad to copy entire if we could spare room) gives an account of the railway schemes before Parliament. There are 595 bills, *only* 47 of which are for works affecting London: 33 of which are for railways, whose united length is 104 miles, most of which are proposed to be underground. Three schemes presented last session were for "high-level railways," and involved the erection of a bridge of one span over the Thames near the Tower, with ample head-way for the shipping. These schemes were perfectly practicable; but were thrown out by the committee, who were partial to the tunnel lines. The other schemes proposed to go through the Thames tunnel; only one of them went into committee, and failed; but is up again this year in a modified form. One, the Blackwall, Greenwich and Woolwich line, is to go under the Thames from Blackwall to Greenwich marshes by a new tunnel 3,304 feet long, the rails being 71 feet below high water. The report shows that, with few exceptions, the proposed works interfere greatly with the sewers, in some instances very seriously. This will require the insertion of protective clauses; and full powers should be secured to the Metropolitan Board of Works to enable them to enforce not only the reparation of any injury done to their works by the carrying out of the various schemes that may pass, but also the repayment of additional costs to which the board may be put.

It is generally conceded that railways in London must be chiefly, if not altogether, tunnel lines. This was clearly the opinion of the joint committee last session, when they recommended the postponement of bills for railways over-head or in open cuttings, while they proposed that many of those in tunnels should be proceeded with; and the proper place for London railways is in tunnels far removed from sight and hearing. But these tunnels will have to be at considerable depths. If to avoid contact with the sewers and pipes, they are constructed near the surface, the ground would have to be opened, street traffic interrupted, and houses taken down. Therefore, the better plan seems to be to construct them so far down as to escape all such interferences; and this would considerably reduce the cost of the lines. Should the descent be an objection, there may be hoists to raise and lower passengers at the stations. Ventilation may be aided by powerful fans; but can not be perfected so long as the present locomotive system is employed. The presence of a fuel-burning engine forbids purity of air; so the fire-grate must be superseded, and engines built on a new principle, which involves neither combustion nor generation of gases on the journey. Difficulties may at first sight present themselves in this question; but we shall, doubtless, one day have them removed —and the problem satisfactorily solved. Probably engines will be made to contain the necessary quantity of steam to work a given distance without combustion in the tunnel.

So much from the *Mechanics' Magazine*, abridged. It is one of the greatest engineering questions of the time; and one that probably will come up in all our large cities, as it is already in New York. The interference with sewers we have already touched upon. The Magazine goes into it *deeply*, and it may be wisely, in advising that railways go below all present structures: they may then go direct to their termini, and keep a dead level. And, perhaps, they may come up to the stations, and have a 30 or 40 feet incline to start their cars, and run them to the next station, to be drawn up by ropes.—*American Artisan.*

RULES TO OBSERVE WHEN YOU TAKE A GUN IN YOUR HAND.—Whenever you take a gun in your hand, inquire if it is loaded. Should there be no person to answer you, if the gun is a muzzle-loader, place the butt on the ground, outside the left foot, having previously fixed the hammer at half-cock, and holding the muzzle in a forward direction, clear of your person, draw the ramrod, and insert it gently into the barrel. If there is a charge in, you will feel the "thud" of the ramrod upon it, while the rod's upper end will project about three fingers'-breadth above the muzzle of the gun. Should the piece not be loaded, the ramrod will sink right down, and the broad metal end will soon announce the empty barrel by the tap against the breech-plug. Never handle a loaded gun except for the purpose of discharging it; *and never at any time—either in jest or earnest—point a gun, loaded or unloaded, at any living thing you don't deliberately intend to kill.*

From the St. Louis Democrat, March 25.

## PROGRESS OF THE PACIFIC R. R.

We are informed that the reports in relation to the hostility of bushwhackers in Jackson County to the workman on the line of the Pacific Railroad, near Independence, have been exaggerated. No laborer has been molested or even threatened, but a few petty thefts have been committed, from time to time, of property belonging to the company. The work has not been stopped a single day, and the bridges destroyed by Price east of Kansas City have been rebuilt. Trains are now ready to run regularly between that place and Independence. Orders have been given for immediately laying the track to the Little Blue, and the work will now be pushed with all possible rapidity from west to east, as well as from east to west.

From Warrensburg the road bed is graded to Kingsville, and the track will be laid to Holden, nine miles from Warrensburg, before the end of next month. All the iron, spikes, ties, and culvert timbers have been bought, and are now ready for use. About 800 laborers are employed on the grading, and were it not for recent wet weather, this part of the work would have been finished as far as Pleasant Hill. Additional laborers are going forward every day. Fifty teams and carts were sent up the road on Thursday morning, and from all the information in our possession, we are happy to assure our readers that the progress of the road toward its final completion is entirely satisfactory. Unless some unforseen accident or interference should occur which cannot be provided against, the company confidently expect that the road will be completed its entire length to Kansas City by the middle of July.

Gov. Fletcher manifests a strong interest in this work, as he does in all enterprises connected with our system of internal improvements. The Governor has secured ample military protection for the laborers employed on the road, and Gen. Pope and Gen. Dodge have assured the company of their hearty co-operation in promoting the early completion of the railroad by the aid of the military force adequate at all times to drive off Rebels in large or small gangs. The presence of three additional companies of cavalry has been secured, and the men are now on the ground protecting the workmen and property of the company. The prospective completion of the Pacific Railroad is an event in which every citizen of St. Louis is interested. For years the want of this important road has been increasing, and we are pleased to record the favorable symptoms of its present condition, which promise so abundantly to give us a finished road before the Summer months are over.

## SUPERHEATING STEAM.

The boiler of Mr. Thomas Prosser, which has been in use about seven years, and was experimented upon by Messrs. Isherwood, Everett and King, by order of the Navy Department, in 1859, and reported upon by Mr. Isherwood in his "Engineering Precedents," has furnished some useful data relative to superheating. In this boiler 113 square feet of surface were in water, and 54 in steam. The vaporization was 2,553 lbs. in 8 hours, from a temperature of 100°; and the superheating varied from 26° to 39°. The pressure was 114 lbs; and 11.76 lbs. were evaporated and superheated by 1 lb of coal.

As the rate of evaporation was slow compared with what is usual in locomotives, and the smoke in the chimney was at a low temperature—about 440° only 60° above the temperature of the steam—this degree of superheating may be taken as a minimum. Had the vaporization been more rapid, the smoke in the upper ends of the tubes would have been hotter, and the difference between their temperature and that of the fire-box would have been less; and the superheating would have been greater. The loss of heat by radiation from the cylinder would have remained the same; and it is probable that the superheating would have been sufficient to prevent condensation in the cylinder when working expansively, which is all that is deemed desirable by the majority of the practicians who have within a few years applied superheaters.

The vertical tubular boiler was first applied in England on account of its superheating the steam. Mr. Prosser's boiler, though different below, is nearly the same above the water line, that is, there is a great extent of tube surface in the steam room. This is deemed a fault by many practicians, because the tubes above the water get over heated, and in many cases their joints are loosened and made leaky; and to avoid this, upright boilers are often made with an annular drum above the upper tube-sheet, and the tubes are wholly under water. This changes the character of the boiler—it is no longer superheating.

Separate superheaters have been found to leak after a short time; so far as we can judge from reports, the separate superheaters are more troublesome than superheating boilers. But the fault in both cases is in the imperfect construction and careless use of them. We have proof that when well made and carefully used, vertical boilers remain tight for ten years, and separate superheaters have endured at least three years. The question, therefore, may be reduced to this: Which way of superheating is most convenient? And the answer may be different in each case; but for small powers we think the upright boiler, without the complexity of a separate superheater, is most convenient, and least expansive. The durability of Mr. Prosser's boiler, which never has required repairs, is very good evidence in support of this view.

On this question of economical superheating depends, in some measure, the question of the economy of expansion. We have had experiments without superheating, and probably without dry steam, made on vessels tied to piers, which showed much condensation in the cylinders, and little benefit from expansion; and from these bad experiments it has been concluded that expansive working is useless. Now we want experiments with superheated steam to settle the question again. —*Artisan.*

## THE PUBLIC DEBT OF ENGLAND.

BY T. B. MACAULAY.

On the 15th of December, 1692, the House of Commons resolved itself into a Committee of Ways and Means. It was proposed to raise £1,000,000 by way of loan; the proposition was approved.

Such was the origin of that debt which has since become the greatest prodigy that ever perplexed the sagacity and confounded the pride of statesmen and philosophers. At every stage in the growth of that debt the nation has set up the same cry of anguish and despair. At every stage in the growth of that debt, it has been seriously asserted by wise men that bankruptcy and ruin were at hand. Yet still the debt went on growing, and still bankruptcy and ruin were as remote as ever. When the great contest with Louis XIV. was terminated by the peace of Utrecht, the nation owed about £50,000,000; and that debt was considered not merely by the rude multitude, not merely by fox-hunting squires and coffee-house orators, but by acute and profound thinkers, as an incumbrance which would permanently cripple the body politic. Nevertheless, trade flourished, wealth increased, the nation became richer. Then came the war of the Austrian succession, and the debt rose to £80,000,000. Pamphleteers, historians, and orators pronounced that now, at all events, the case was desperate. Yet the signs of increasing prosperity—signs that could neither be counterfeited nor concealed—ought to have satisfied observant and reflecting men that a debt of £80,000,000 was less to the England which was governed by Phelam than a debt of £50,000,000 had been to the England which was governed by Oxford. Soon war broke forth, and under the energetic and prodigal administration of the first William Pitt, the debt rapidly swelled to £140,000,000. As soon as the first intoxication of victory was over, men of theory and men of business almost unanimously pronounced that the fatal day had now really arrived. The only statesman, indeed, active or speculative, who did not share in the general delusion, was Edmund Burke. David Hume, undoubtedly one of the most profound political economists of his time, declared "our madness has exceeded the madness of the Crusaders." Richard Cœur de Leon and St. Louis had not gone in the face of arithmetical demonstration. It was impossible to prove by figures that the road to Paradise did not lie through the Holly Land; but it was possible to prove by figures that the road to national ruin was through the national debt. It was idle, however, now to talk about the road; we had reached the goal, all was over. All the revenues of the Island north of Trent and west of Reading were mortgaged. Better for us to have been conquered by Prussia or Austria than to be saddled with the interest of a debt of £140,000,000

And yet this great philosopher, for such he was, had only to open his eyes and to see improvement all around him—cities increasing, cultivation extending, marts too small for the crowd of buyers and sellers; harbors insufficient to contain the shipping; artificial rivers joining the chief inland seats of industry to the chief seaports; streets, better lighted: houses better furnished; richer wares exposed for sale in statelier shops; carriages rolling along smoother roads. He had, indeed, only to compare the Edinburgh of his boyhood to the Edinburgh of his old age. His predictions remain to posterity a memorable instance of the weakness from which the strongest minds are not exempt Adam Smith saw a little, and but a little further. He admitted that, immense as the burden was, the nation did actually sustain it and thrive under it in a way that nobody could have foreseen. But he warned his countrymen not to repeat so hazardous an experiment. The limit had been eached. Even a small increase might be fatal.

Not less gloomy was the view which George Grenville, a minister eminently diligent and practical took of our financial situation. The union must, he conceived, sink under a debt of £140,000,000, unless a portion of the load was borne by the American colonies. The attempt to lay a portion of the loan on the American colonies produced another war. That war left with us an additional £100,000,000 debt, and without the colonies, whose help had been represented as indispensable. Again England was given over, and again the strange patient persisted in being stronger and more blooming in spite of all the diagnostics and prognostics of state physicians. As she had been visibly more prosperous with a debt of £140,000,000 than a debt of £50,000,000, so she was visibly more prosperous with a debt of £240,000,000 than with a debt of £140,000,000. If the most enlightened man had been told, in 1792, that in 1815 the interest on £800,000,000 would be duly paid to the day at the bank, he would have been as hard of belief as if he had been told that the Government would be in possession of the lamp of Aladdin, or the purse of Fortunatus. It was in truth a gigantic, a fabulous debt; and we can hardly wonder that the cry of despair should have been louder than ever. But again that cry was found to be as unreasonable as ever. After a few years of exhaustion, England recovered herself. Yet like Addison's valetudinarian, who continued to whimper that he was dying of consumption till he became so fat he was shamed into silence, she went on complaining that she was sunk in poverty till her wealth showed itself by tokens that made her complaints ridiculous. The beggared, the bankrupt society not only proved itself able to meet all its obligations, but while meeting these obligations its growth could almost be discerned by the eye.

In every country we saw wastes recently turned into gardens; in every city we saw new streets, and squares, and markets, more brilliant lamps, more abundant supplies of water; in the suburbs of every great seat of industry we saw villas multiplying fast, each embosomed in its gay little paradise of lilacs and roses. While shallow politicians were repeating that the energies of the people were borne down by the weight of public burdens, the first journey was performed by steam on a railway. Soon the island was intersected by railways. A sum exceeding the whole amount of the national debt at the end of the American war was in a few years voluntarily expended by this ruined people in viaducts, tunnels, embankments, bridges, stations, engines. Meanwhile taxation was almost constantly becoming lighter; yet still the exchequer was full. It may now be affirmed, without fear of contradiction, that we find it as easy to pay the interest on eight hundred millions as our ancesters found it a century ago to pay the interest on eighty millions.

It can hardly be doubted that there must have been some great fallacy in the notions of those who uttered, and of those who believed, that long succession of confident predictions so signally falsified by a long succession of indisputable facts To point out that fallacy is the office rather of the political economist than of the historian. Here it is sufficient to say that the prophets of evil were under a double delusion. They erroneously imagined that there was an exact analogy between the case of an individual who is in debt to another individual, and the case of a society which is in debt to a part of itself; and this analogy led them into endless mistakes about the effect of the system of funding. They were under an error no less serious touching the resources of the country. They made no allowance for the effect produced by the incessant progress of every experimental science, and by the incessant efforts of every man to get on in life. *They saw that the debt grew, and they forgot that other things grew as well as the debt.*

## RAILWAY PROGRESS IN MASSACHUSETTS.

In the analysis of the operation of the railways of this State for the past twenty-three years, there are some striking facts. During that period there have been about a thousand miles of new road constructed; and the cost per mile to-day is about $3000 less than it was in 1842. The receipts, then about two millions of dollars, are now about fifteen millions; the net income has increased from $1,012,000 to $5,313,000. The earnings per mile of road have about doubled; the passengers have increased from four and three quarters millions in 1846, to over seventeen and one half millions in 1864; the freight movement from 1,140,000 tons to 4,954,000 tons. The earnings per mile run are larger than ever before, and the expenses per mile run are likewise larger. The net income per cent on the cost of the entire system has reached the very handsome figure of 7.04 per cent. After a very liberal expenditure for repairs and reconstruction, and a surplus of nearly $5,000,000 of assets, these figures show that the whole system of railways in this State has been prosperons. In the face of this prosperity there is a strong movement among the shareholders to put up the rates of fare, and a corresponding feeling of opposition among the people. This opposition has shown itself by petitions to the Legislature and by efforts to find other means of transit. The plea of the shareholders is, that under the present currency the profits are not real; that, reduced to a specie basis, they fall far below what should be earned by the original investment, which was made in gold or its equivalent, and that some provision should be made for the threatened disturbance of values incident to the coming peace. We do not propose to argue this question between the public and the owners of railway property at the present time, and shall merely say that the nearer approach in value between the currency and gold, is in favor of holders of railway property, even at the present rates of fares, and that to meet any falling off in the business, it will be better to reduce the number of trains and lessen the speed, rather than to burden the public with an additional price. A discrimination in prices, too, between fast and slow trains, would be good policy.

The condition of the railway system of the State is very healthy and strong. In reserved and surplus funds to meet depreciation and extraordinary contingencies, the companies have nearly ten per cent. upon the cost, and the tracks and rolling stock are in the usual good condition, many of them being especially excellent in these particulars. With over one mile of railway for every thousand persons, or every five square miles of territory, and an average expenditure for railway construction of some fifty-five dollars for every person in the State, there can be no complaint that the people lack traveling facilities. As a general rule, the different roads are exceedingly well managed, accommodating the public and making safe returns to the shareholders. There are several new enterprises which will, when finished, become exceedingly valuable to the business public. The Hartford and Erie, from Boston to the Hudson River, connecting with the great Erie Railway; the Air Line Railway from Boston to New York city, and the Hoosac Tunnel line, which will give an independent line to the commerce of the Erie Canal, are all promising enterprises, and when finished will add greatly to the general business of this city and of the different localities touched by them. Our railway system though not perfect, yet compares favorably with that of any other State, and our citizens may well feel a degree of pride in their substantial success.—*Railway Times.*

---

Ohio Law.—In the Senate Mr. Williamson's bill, to provide for the equalization of the assessment of the property of railroads, was passed. It consists but of two sections, as follows:

Section 1. *Be it enacted by the General Assembly of the State of Ohio*, That the Auditor of State, Treasurer of State, and Attorney General, shall consitute a board of equalization of the property of the several railroads in this State, as found and determined by the several boards created under the act entitled an act supplementary to an act entitled "an act for the assessment and taxation of property in this State, and for levying taxes thereon according to its true value in money," passed May 1, 1862, and the act amendatory thereof, passed April 14, 1863. Said board shall meet annuallly on the first Wednesday of July, at the office of the Auditor of State, in Columbus, and shall have power to hear complaints and equalize all the property of railroads as returned by the several boards of assessors and appraisers under said act, by adding to the valuation such roads as in their opinion are returned below their true value in money, estimated according to said amendatory act, passed April 14, 1863, or by reducing the value of such roads, as in their opinion, have been returned above their true value; provided, that such board shall not reduce the aggregate value below the value returned by the appraisers.

Sec. 2. This act shall take effect from and after its passage.

---

Wisconsin—Important Railroad Decision.—A case of considerable importance has been decided in Wisconsin. At a private railroad crossing a gate had been left open, and some cattle entering were killed by the train. The owner of the cattle sued the owner of the land on both sides of the road for the worth of the cattle killed. The defendant demurred—

1st. That defendant was not obliged to keep up said bars or gate.

2d. Plaintiff's remedy, if any, is against the railroad, and not against defendant.

3d. It does not appear that defendant opened the gate.

There is no law in Wisconsin directly requiring railroad companies to fence in their track; but there is a statute making the companies liable for any stock that may be killed on their tracks in consequence of "failing to fence such road on either or both sides thereof, against live stock running at large, at all points where said roads have the right to fence."

The Court decided that the companies should make crossings with cattle guards for the accommodation of the owners of land, who are compelled to cross the track into the public highway; and when instead of cattle guards they choose to erect bars or gates "no responsibility rests on the owner of the adjoining lands, to keep the same up and closed for the protection of cattle or stock rightfully on the adjoining lands, but the responsibility, whatever it is, rests wholly on the railroad, except only for the willful misconduct of the owner.

## MONETARY AND COMMERCIAL.

We have had another week of extraordinary ups and downs; the *downs* have, however, been mostly to the rebels, while the *ups* have been for the nation and its securities. On Monday, we had authentic intelligence of the fall of Richmond, on which the commercial and financial community went wild. The people on change did nothing but hurrah and shake hands,—and throughout the city, it was much the same. On that day, nothing comparatively was done, and but little since. Business has, however, resumed its usual course,—and Military events cease to disturb the money and commercial markets. The great and most sudden effect of Union victories has taken place, and probably the markets will hereafter be much more stable. The fall in gold was much less than some expected, because the recent events were, by most of the operators anticipated.

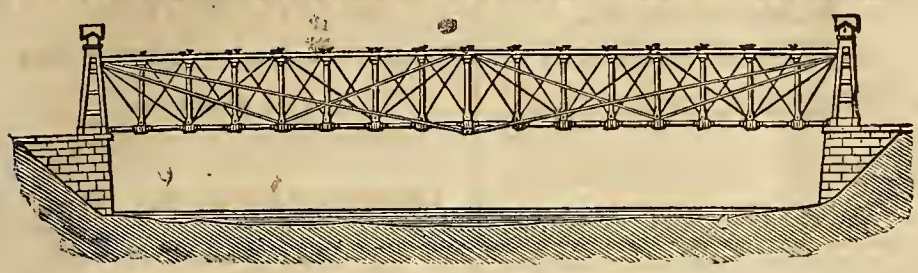
| | Opening. | Highest. | Lowest. | Closing. |
|---|---|---|---|---|
| March | 29.....152 | 152⅜ | 151¼ | 151⅝ |
| " | 30.....150¾ | 151½ | 149⅝ | 151⅛ |
| " | 31.....151¾ | 152 | 151¼ | 151½ |
| April | 1.....151 | 154 | 151 | 154 |
| " | 2.....148 | 149⅜ | 145⅛ | 145¾ |
| " | 3.....147⅜ | ..... | ..... | 146⅛ |
| " | 4.....147¼ | 148 | 146⅝ | 147¾ |

The *Price Current* says, the markets for produce was unsettled. The following remarks of the *Price Current* are very correct. With a great deal of paper money, gold will command some premium. But, when the Rebellion is ended, it can not be very much and on the whole, gold must go steadily down, though is may have spells of rising.

"The belief entertained by buyers that prices will further decline, keeps them out of the market, excepting as far as it is necessary to meet their present necessities, whilst on the other hand, those who hold produce think the "hottom is reached" every day, and avoid pressing their goods on the market. And then many still cling to the fallacy that gold can not remain down, whilst there is such an enormous amount of paper in circulation, and reason that the decline was more the effect of fright than of any real cause; they find it difficult to accept the logic of facts, and clasp this faith to their bosoms, notwithstanding though it has made bankrupts of many. We do not hesitate to say that the belief so generally held and acted upon during the fall and winter months, that gold could not rule much below 200, because of the great expansion of the paper currency, has ruined thousands of individuals, and will continue to have this result, simply because that it is false, theoretically and practically.

WRIGHTSON & CO.
BOOK & JOB PRINTERS,
167 Walnut St.
CINCINNATI. OHIO.

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

Jan. 5, '63. 1y. Letter Box, 1392. C. J. SCHULTZ, Pittsburgh, Pa.

---

**HOLENSHADE, MORRIS & CO.**

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or not the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive En-

419 y 1

---

**KNOX & SHAIN,**

**Engineering and Telegraphic**

INSTRUMENT MAKERS,

[illegible]

---

## JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS

Either Single or Double Plate,

With or without Axles.

**WHEELS FITTED**

**To Hammered or Rolled Axles,**

Manner, at the Shorteste, and on the

**Most Reasonable Terms.**

---

Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

**MACHINE SHOP**

SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

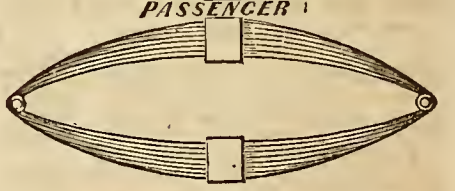
RAILWAY SPRINGS.

**FREIGHT**

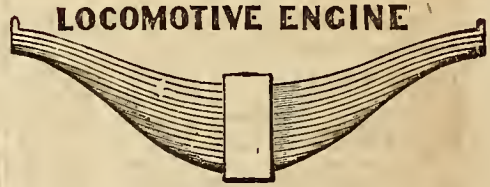




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, an one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI, O.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

**W. M. F. HEWSON,**

## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition.*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY

W. P. SMITH, *Master Transportation, Baltimor*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A. M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A. M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M. & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M Istreet

C. E FOLLETT,
General Ticke Agent.

W D. GRISWOLD nera' Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

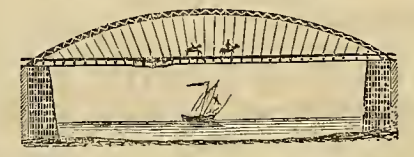
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



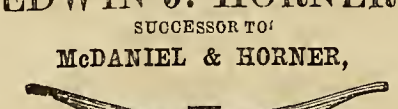
CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Snt. 2. MOSELEY & CO.
BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

THE SCHENECTADY

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!!



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P. M. night.

On Sundays, 4.30 A. M.; 11.30 P. M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M. (Express.

On Sundays, 10.24 P. M.

☞Through connections made for all points East and Wes

WM. TEARNE Supt

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, APRIL 13, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| ***Little Miami—*** | | |
| Cincinnati Express | 6.00 A. M. | 7.30 P. M. |
| Mail | 9.00 A. M. | 8.15 A. M |
| Columbus Accommodation | 4 00 P. M. | 11.30 A. M. |
| Morrow Accommodation | 6.20 P. M. | 8.00 A. M. |
| Night Express | 10.00 P. M. | 10.05 A. M. |
| ***Cincinnati, Hamilton & Dayton—*** | | |
| Dayton & Sandusky Mail | 7.00 A. M. | 5.45 P. M. |
| Dayton & Toledo | 7.00 A. M. | 9.45 P. M. |
| Cin. & Chicago Air Line Express | 7.00 A. M. | 9.45 P. M. |
| Dayton Accommodation | 2.20 P. M. | 5.45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5.00 P. M. | 10 20 A. M. |
| Cin & Chicago Air Line Express | 7.00 P. M. | 12.35 P. M. |
| Hamilton Accommodation | 7.00 P. M | 8.05 A. M. |
| do do | 10.00 A. M. | 6.45 A. M. |
| ***Marietta & Cincinnati—*** | | |
| Mail Express | 7.40 A. M. | 7 00 P. M. |
| Chillicothe Accommodation | 3.30 P. M. | 11.30 A. M. |
| ***Ohio & Mississippi—*** | | |
| Louisville, St. Louis and Cairo Mail | 7.00 A. M. | 11.30 P M. |
| St. Louis and Cairo Express | 6.00 P. M. | 5.00 A. M. |
| Louisville, St. Louis and Cairo Express | 7 40 P. M. | 8.20 A. M. |
| ***Indianapolis & Cincinnati—*** | | |
| St. Louis and Chicago Express | 6.30 A. M. | 11.00 A. M. |
| Mail | 1.40 P. M. | 5.00 P. M. |
| Night Express | 4.00 P. M. | 1,30 A. M. |
| Lawrenceburg Accommodation | 4.25 P. M. | 8.35 A. M. |
| Harrison Accommodation | 9.00 A. M. | 3.00 P. M. |
| ***Cincinnati Wilmington & Zanesville—*** | | |
| Morning Express | 9 00 A. M. | 7.30 P. M. |
| Accommodation | 4.00 P. M. | 8.05 A M. |
| ***Kentucky Central,—*** (City time.) | | |
| First Train | 6.00 A. M. | 10.40 A. M. |
| Second Train | 2.00 P. M. | 6 00 P. M |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## MATERIAL PROGRESS OF THE COUNTRY,

NEW BUILDINGS AND WEALTH.

We have shown in previous articles, the growth of the country in many respects, notwithstanding the progress of the war. Immigration and natural increase have enlarged the population very materially, and it is shown by the Commissioner of Statistics for the State of Ohio, that notwithstanding all that have died, by sickness or battle, or been disabled.—we have 300,000 able bodied men more, than we had when the war commenced We have probably three millions more people. The Commissioner of Statistics has also furnished various other facts, in regard to Ohio, which serve as *data* for an estimation of results, in regard to other States. One of the most interesting of these is the progress of "*new structures,*" which comprehend all kinds of buildings (not outhouses), but including barns, stores, factories, dwellings, public buildings of all kinds, &c., &c.

The following is the number of "*new structures*" in Ohio, for the past seven years, given by the Commissioner of Statistics, viz.:

| | |
|---|---|
| Number of new structures | 6,692 |
| Total value | $4,132,836 |

Of the new structures, a portion were—

| | |
|---|---|
| Factories, of different kinds | 99 |
| Mills | 85 |
| Distilleries | 3 |
| Rolling Mills | 2 |
| Oil Mill | 1 |

No accurate account of churches and public buildings is given, but very few were built.

The comparative number and value of new structures in the last seven years are as follows:

| | No. | Value. |
|---|---|---|
| In 1858 | 10,458 | $5,012,054 |
| 1859 | 7,812 | 4,972,645 |
| 1860 | 8,100 | 3,685,513 |
| 1861 | 9,831 | 4,463,042 |
| 1862 | 8,013 | 2,988,520 |
| 1863 | 5,278 | 3,009,921 |
| 1864 | 6,692 | 4,132,836 |

There is a small increase in the number of buildings erected, and an increase of 33 per cent. in value. This proves that, what general observation shows, there is a considerable revival in the growth and enterprise of this State. The largest number of new structures are either in the new counties or those which have large towns in them. These are the counties of Hamilton, Montgomery, Cuyaboga, Lucas, Franklin, Allen, Butler, Sandusky, Greene, Crawford, Hancock, Seneca and Williams. The counties of Wayne, Stark, and some others in north-centre of the State have also increased largely in new buildings.

The aggregate of the three first years, (1858, 1859 and 1860,) was:

| | | |
|---|---|---|
| New Structures | 26,370 | $13,670,212 |
| Average of one year | 8,790 | 4,554,070 |

The average of the three last years, viz.: (1861, 1862, 1863,) was:

| | | |
|---|---|---|
| New Structures | 20,983 | $10,132,377 |
| Average of one year | 6,994 | 3,374,125 |

Then it will he seen that there was a sensible decline in the number and value of buildings erected since the war began; but it will also be seen, that the number actually erected in the four years of the war, was very great. The aggregate of the years 1861, 1862, 1863, 1864, was: — New Structures, 30,814. Of these, two-thirds are dwelling houses; a few public buildings and factories, and the residue, barns. It is shown, however, by statistics, that the *density* of population to buildings of *all kinds* exceeds 6½. Applying this to the above number of buildings (30,814) we find, that the increase of population in Ohio, since 1860, should be 200,298; and we have not the slightest doubt it is. This would make the population of Ohio, in the beginning of 1865, 2,540,000. The same increase for the whole country would give *thirty-four millions*, and there can be no doubt such is the fact. The new states and territories, both on the Mississippi and the Pacific, have increased at a much more rapid rate; so have most of the large towns.

The progress of wealth in Ohio, during the war, has been but little; but, the increase of wealth in twenty-five years past has been immense. The following is the return of the Lands and value of Real Estate in Ohio, given by the Commissioner:

The total quantity of land in Ohio is 25,376,960 acres. The quantity returned for taxation in various years, as appears from the Auditor's reports, were:

| | Acres. |
|---|---|
| In 1841 | 21,041,784 |
| 1845 | 23,456,486 |
| 1850 | 25,220,083 |
| 1855 | 25,220,083 |
| 1860 | 25,316,099 |
| 1861 | 25,321,705 |
| 1862 | 25,329,580 |
| 1863 | 25,360,407 |
| 1864 | 25,341,345 |

There is still a small quantity of land, owned by the Government, or the State, and in some cases individuals, which is not taxed. The valuation of these (including all town property) was, at different periods, as follows:

| | Value of Real Estate. |
|---|---|
| In 1841 | $100,851,837 |
| 1845 | 108,185,744 |
| 1850 | 341,388,838 |
| 1855 | 578,858,539 |
| 1860 | 639,894,311 |
| 1861 | 643,885,552 |
| 1862 | 645,670,080 |
| 1863 | 649,500,022 |
| 1864 | 655,498,100 |

It appears, that the increase of value in real estate from 1860 to 1864, inclusive, was but fifteen millions, but the increase for *ten years*

(1855 to 1864 inclusive), was $277,000,000, or 50 per cent.; and the increase from 1850, *fifteen years*, was $314,000,000, or nearly 100 per cent. The increase in *twenty years* was 500 per cent. Nearly the same ratio of increase will apply to all the States, except New England, New Jersey, Maryland, and Delaware. The new States have increased in the value of real estate, in a much greater ratio. In Ohio, the increased value of personal property, during the war, has been much greater than that of real estate.

The following is a table of the values of personal property furnished by the Commissioner.

The valuation of real estate (which is stated above), being $655,498,100, the aggregate value of all personalties was $351,198,016, making the whole aggregate of property $1,006,696,116. The increase of personal property in the last fourteen years, were as follows:

| | |
|---|---|
| In 1850 | $ 98,487,202 |
| 1855 | 283,118,815 |
| 1860 | 248,408,290 |
| 1862 | 243,615,212 |
| 1863 | 286,871,222–inc. 18 per ct. |
| 1864 | 351,198,016–inc. 24 " |

In fourteen years the advance in the value of personal property was 250 per cent., a much greater ratio of increase than that of real estate. This is accounted for, in a great measure, by the fact that the *prices of the day*, which are regulated in a great degree by the increase of currency, are put on all personal property, which is not the fact with real estate. We see in the preceding section that the assessors have not varied the price of land at all, while the price of personal property has been raised 50 per cent. in two years.

The fact is, in regard to real estate, with the exception of some fancy property, real estate *has been unaffected in price*, by the increased volume of currency. It has been like Government Bonds, rather depressed as the war was prolonged, but *will be firmer, as the war draws to a close*. The cause of this is very obvious; *first*, the return of a great number of agricultural laborers will furnish greater means for the improvement of lands, and greater demand for them; *secondly*, a vast amount of capital, which has been going into Government Bonds, and the materials of war must henceforth seek investment in real estate, manufactures and commerce. A large part will go into lands, and houses. Building will be revived, manufactures will be revived with great force; *thirdly*, and of greater importance, the confidence in the stability of the Government, of commerce, and industry will be greatly increased, and give value and stability to all kinds of property.

☞ It is expected that the Pacific Road will be completed to Kansas City by the middle of July. The Leavenworth papers call upon the people to secure its advance to that city.

## GRAND RAPIDS & INDIANA R. R.

KALAMAZOO, MICH., APRIL 3D, 1865.

*To the Directors, Stockholders, and all others interested:*

GENTLEMEN:—The next regular meeting of the Board of Directors will be held at this place on Tuesday, April 18th, at 10 o'clock. Matters of the most vital importance to the project will be presented and discussed, and the public is respectfully invited to attend and participate in the proceedings.

The line of the proposed road extends from Ft. Wayne, Ind., to the straits of Mackinaw, Mich.,—353 miles. In *soil* and *climate* nature has adapted the country to become one of the best agricultural districts in the west:—the southern part is already highly improved, and on the construction of the road will become still more highly developed;—and the northern part will speedly become settled and improved after the construction of the road.

South of the Grand Rapids there are four natural divisions of the line.

| | miles |
|---|---|
| 1. From Ft. Wayne to Air Line R. R... | 28.00 |
| 2. " the Air Line R. R to Sturgis.. | 35.00 |
| 3. " Sturgis to Kalamazoo..... | 35.98 |
| 4. " Kalamazoo to Grand Rapids... | 48.35 |
| Total ..... | 138 33 |

The project has been fully investigated by competent engineers and railroad men of practical experience and high standing, all of whom recommend it as one that will be financially and commercially successful on its completion.

Before the Southern Rebellion the road could have been completed at a cash cost of $15,000 per mile.—

At $15,000 per mile it would cost...$5,295,000
At $20,000 per mile it woold cost... 7,060.000
At $25,000 per mile it would cost... 8,825,000

It could now be constructed at $20,000 per mile,—but should it cost $25,000, and the lands bring $10 per acre, that would be largely over a million more than its cost.

The work which has been done on the roadbed cost the company $260,000, and is distributed as follows:

| | miles. |
|---|---|
| Between the Air Line R. R. and Strugis it is equal to the grading of..... | 15 |
| Between Strugis and Kalamazoo it is equal to the grading of..... | 16 |
| Between Kalamazoo and Grand Rapids it is equal to the grading of..... | 4 |
| Between Grand Rapids and Cedar Springs it is equal to to the grading of..... | 15 |
| Total, (miles)..... | 50 |

The right of way which has been deeded to this company could not now be obtained for $50,000.

Were the sections all full the land grants would be as follows:

| | acres. |
|---|---|
| 1. The grant of June 3, 1865, from Grand Rapids to Little Traverse Bay, 182½ miles..... | 700,800 |
| 2. The enlarged and extended part of the grant of June 7, 1864, from Ft. Wayne to Grand Rapids, 138 miles | 529,920 |
| Total, (acres)..... | 1,230,720 |

On examination of the map, I think the grant of June 7th, 1864, may fall somewhat short, so as to reduce the total amount of the two to about 1,000,000 acres. With proper management the lands will be made to realize $10 per acre—$10,000.000. The time limited by the land-grant laws for the construction of the road is as follows:

1. The first 20 miles north of Grand Rapids must be completed on or before Jan. 1st, 1866; and 20 miles each year thereafter, or the grants will be forfeited by the Company and revert to the State of Michigan—for so much as shall not be so completed.

2. The whole road from Fort Wayne to Little Traverse Bay must be completed on or before June 3d, 1874—else the grants will be forfeited by the State and revert to the United States—for so much as shall not then be completed.

Should the company construct the 20 miles this year, there would be no difficulty in obtaining any reasonable legislation thereafter. The first grant has been out of market nearly nine years. large tracts of it have become very valuable, and there is a strong demand for it by the adjoining and advancing settlements.

The company has recently obtained a subscription to its capital stock to the amount of $215,000. With reasonable efforts additional subscriptions between Ft. Wayne and Cedar Springs could be obtained to the amount of $775,000 or more. And there is an old subscription on the books, of which more or less will be paid, to the amount of $318,639 18. There is no doubt but an amount amply sufficient to put the road-bed and ties in readiness for the rails, and to fence the track, can be obtained along the line, from Ft. Wayne to Grand Rapids.

In case any division of the road should be constructed, that fact would inspire such confidence and impart such credit as would enable the company soon to secure the completion of the whole.

Were the road constructed to-day, it would be remunerative to own and operate from Ft. Wayne to a point 60 miles north of Grand Rapids, independent of any land grant. But as the land grants depend on the construction of the first 20 miles north of Grand Rapids this year, the first and most important object to accomplish is its construction.

For several years past but little attention has been paid to the organization of the company—merely sufficient to keep it alive. Now the Board of Directors ought to consist of working men.

The foregoing statements show that elements amply sufficient to secure the construction of the road are now accessible to the company. All that is needed to make the project highly successful is for these elements to be properly applied to the work.

JOSEPH LOMAX, *Pres't.*

## PETROLEUM.

We shall endeavor to give occasionally a summary of the petroleum operations. As yet, we have only a few great facts, which do not determine exactly what we are to expect. There are two great problems as yet not solved: 1. Will the oil wells hold out? 2. If they do, can they be discovered in sufficient number through the immense district in which it is claimed that oil can be found? The region in which oil, it is claimed on geological principles, is to be found is an immense one, running on the outer rim of all the coal basins. In the valley of the Ohio this is an immense district, extending through a portion of Ohio, West Virginia, Kentucky, Tennessee, and part of Indiana, Illinois, and part of Michigan. If it be true that round this great circuit petroleum can be found, and the reservoirs do not give out, what may not be expected? The demand for oil all over the world is very great, and if such are the facts, the greater part of it will be supplied from the Ohio Valley.

We saw a fine specimen of petroleum from Pomeroy where a flowing well has been struck at a very short depth. The following is an extract from the letter of an oil hunter on the Little Kanahwa. Next to Oil Creek, that is the region most frequented by petroleum men:

"Arriving at the lands I had in view, I found the best geological indications I have seen in this part of the country, with the exception of surface springs or gas springs. These are not to be found in this immediate locality, though they both abound a few miles further up Reedy Creek and at Burning Spring, which is about three miles due east of this point on the Little Kanawha; the site of Oil Town, at and near which point there is about 100 wells, some flowing, some pumping, some which formerly yielded largely have never been reopened since the place was burned; some never yielded any oil, and many are now being bored. Some of the new wells have oil in fair amounts though only 237 feet deep. These are being bored deeper. There is great activity exhibited at this place, and the amount of oil that will be afforded here soon will no doubt be enormous. I was much interested in the new patent drill or borer now in use here. This instrument consists of an auger or bit four inches wide, straight across its edge with lips or side cutters returned from the bit both ways at both its sides so as to cut the hole smooth and round at one operation, that is without *rimming*. This bit is about 5 inches long, ¾ of an inch thick and made of cast steel; the upper part of it is round and the size of the hole to be bored; a stem of about 3 inches diameter is turned on the upper end and screws into the tube or guide which is about 4 feet long and the size of the hole outside; the opening through this tube is about 3 inches diameter and opens into the gas tubing (2½ inches,) which forms the boring rod; through the neck of the bit a hole of some two inches diameter is bored and continued down into the bit some distance through which the borings pass up into the tube, a valve being placed on the top of the neck of the bit by which the borings when forced up by the downward stroke is retained in the same manner as water in a common lifting pump, and the successive strokes force them up through the gas tube boring road to the top, thus acting as a sand pump and dispensing with that tool. This claims to bore at an average rate of one foot per hour of working time. It appears to be a valuable improvement. There is at Burning Spring and that vicinity evidences of an upheaval, the rocks being much displaced, the main dip being N. N. W., the angle about 25 deg. The Reedy Creek district, which I have visited, shows also evidences of displacement, especially in the bottoms of the streams. At this point the main axis of motion seems to have been from N. W. to S. E., but the dip is in every direction, and in some cases probably 40 deg; the mountains are some 600 feet high and very steep. There will be a number of wells bored in this vicinity the coming summer. Many wells are already commenced below Burning Spring, on the Kanawha and other streams. I leave for Big Sandy by first boat.

## PENNSYLVANIA LAW ON R. R.

### TOLLS AND CHARGES.

Important Decision of the Supreme Court of Pennsylvania, in Equity, on Tolls for Use and Charges for Service—Philadelphia and Reading Railroad Company Defendant.

In the Supreme Court of Pennsylvania, at Philadelphia, March 29, 1865.

Timothy Boyle versus The Philadelphia and Reading Railroad Co., and others. } In Equity—Heard on bill and answer.

STRONG, JUSTICE.—This case presents the single question whether the Philadelphia and Reading Railroad Company have a right, under their charter, to charge, receive or collect for the transportation of property carried by them over their road more than four cents per mile, and more than two cents per mile for conveying each passenger.

The company was incorporated under an Act of Assembly passed on the 4th of April, 1833. It was one of the earliest corporations of the kind created in this Commonwealth. The second section of the act gave to it full corporte powers for the purposes for which it was created, with the provision, however, "that nothing in the act contained should be considered as giving to the said corporation any banking privileges, whatsoever, or any other liberties, privileges or franchises, but such as may be necessary or incident to the making and maintaining of said railroad and the conveyance of passengers and the transportation of the mail, and of goods, merchandise and commodities thereon."

By the eleventh and twelfth sections the company was empowered to locate and construct a railroad from Philadelphia to Reading.

The twentieth section enacted that it should "be lawful for the president and managers, from time to time, to ordain and establish rules and regulations for the due ordering of all traveling and transportation on the said road, and for its preservation, with power to alter, repeal, enlarge or amend the said rules and regulations, as they may deem expedient," and that they should have full power and authority to prescribe the kinds and descriptions of cars, carriages or wagons, to be used on the said road for the conveyance of passengers and the transportation of the mails, or of goods, wares, merchandise, minerals, and to regulate the speed at which they shall travel, and to adopt and enforce such rules and regulations in relation to the transit thereof as they may deem expedient: Provided, that the toll on any species of property shall not exceed an average of four cents per ton per mile, nor upon each passenger an average of two cents per mile."

The twenty fourth section required the company, at the end of the third year after the charter should be obtained, and at the end of every year thereafter, to furnish to the Legislature a verified abstract of their accounts, showing the amount of capital paid in, and the debts of the company, the amounts received for tolls and transportation, and rates charged, and the amount of dividends declared.

By supplementary acts passed on the 31st of March, 1837, and the 20th of March, 1838, the company was authorized to extend their road from Reading to the borough of Pottsville, with all the rights, privileges and immunities secured to them by law on other parts of their road, and subject to the same liabilities, restrictions and provisions imposed upon them in the first mentioned act.

From these provisions of the acts of Assembly it is plain that the company was incorporated both as a railroad and a transportation company. As a railroad company, they had power to construct and maintain a railroad from Philadelphia to Pottsville, and to charge and receive tolls from those who might transport either merchandise or passengers over it. As a transportation company, authority was given them to transport either passengers or the property of others over their own road, in their own cars and with their own motive power. Both these agencies for transportation, that of the company, and that of others using the roadway of the company to transport for themselves, were evidently in the mind of the Legislature. That it was contemplated others besides the company might use the road after its completion, and might transport upon it their own property, as well as passengers, might put cars and carriages upon the road, is beyond question. If not, the entire twentieth section of the original act, the act of 1833, is unmeaning and even absurd. The road was to be a public highway, as truly such as is a canal or a turnpike road, though it was placed under the care and management and regulations of its owners. For this reason the company was empowered, from time to time, to *ordain and establish* rules and regulations for the due ordering of all traveling and transportation on the road, and for its preservation, and to *prescribe* the kinds and descriptions of cars, carriages or wagons to be used on the road for conveying passengers and transportation of goods, and to regulate the speed at which they shall travel, and to *adopt and enforce* rules in relation to the transit thereof. This means, beyond doubt, regulations for other transporters not for themselves. It is a grant of power. No such grant was necessary for their own regulation. To *ordain* for themselves, to *prescribe* for themselves, and to *enforce* such ordinances and prescriptions against themselves, if such was the meaning of the Legislature, involves an absurdity. A power to prescribe rules implies a superior and an inferior, a law-giver and a subject. It was then traveling by others, transportation by others than the company, which the Legislature had in view when this section was enacted, and it was to this section that the proviso upon which the complainant relies was appended. It was of course an exception from the power previously granted in general terms, a limitation upon the authority to ordain rules and prescribe regulations for the use of the road by others

than themselves. It could, therefore, have no reference to their own transportation of property or passengers. The mischief against which it was intended for a guard is readily seen. Having made all others who might desire to become carriers on the road, subordinate to such rules and regulation as the company should prescribe, it was apparent that they might be driven off by the imposition of exorbitant charges. Hence, for their protection, it was provided that, by the rules which the company was authorized to prescribe and enforce upon such persons, no greater toll should be charged than four cents per ton per mile on property, and two cents per mile for each passenger. The subject matter of this section then was the power and right of the company as a railroad corporation. It has no reference to the company as transporters. As such, it neither confers authority upon them, nor does the proviso impose a restriction.

That the proviso was not intended to limit the charges which the company might make in the conduct of their own business as transporters is deducible, also, not only from the fact that it is a restriction upon the power previously given in unlimited terms to prescribe rules for others, an exception out of what without it would have been granted, but from the other fact that it was *toll* and not freight for which maximum rates were fixed. The Legislature must be considered as having used words in the ordinary signification, and especially so when their technical sense and their ordinary signification are the same. The legal meaning of the word "toll" is, and always has been, well defined. It is "a tribute or custom paid for passage," not for carriage—always something taken for a liberty or privilege, not for a service; and such is the common understanding of the word. Nobody supposes that toll taken by a turnpike or canal company include charges for transportation, or that they are anything more than an excise demanded and paid for the privilege of using the way. As already said, the Philadelphia and Reading Railroad Company was one of the earliest railroad companies chartered in this State. Before 1833 transportation had been generally over common roads, turnpikes and canals. The common and the legislative mind were then familiar with what was called tolls. They understood by them sums paid for liberty of passage without more, and this whether due to a turnpike, a canal or a bridge company. Certainly it was never supposed that tolls were a compensation for the use of carriages, for motive power, for superintendence in transit, and for service rendered in transporting, in addition to the liberty of using the way.

That the word "toll" as used in the act of April 4th, 1833, does not mean all *charges* for transportation that may be demanded when the company furnish the road and also the transportation, is still more plain when it is noticed that the Legislature, by the act itself, have spoken of amounts received for tolls and amounts received for transportation, as different things. The company was required to furnish annually an abstract of their capital, and debts, and the amounts received for tolls and transportation, and rates charged. Tolls, transportation, and rates, therefore, were understood to be not identical. Not the aggregate of receipts was required, but the amounts received from each of the three sources of income; if the company furnished but roadway, the amount of tolls; if they furnished motive power, in other words, transported, the amount received from that source; if they furnished carriage, superintendence, service and roadway, the amount of the rates charged. If "tolls" mean every possible charge, the requirement to make return of the amounts received for transportation and for rates charged, was, to say the least, superfluous.

I have examined all the acts of Assembly which provided for the incorporating railroads enacted prior to April 4th, 1833, and in none of them do I find that the Legislature confounded "tolls" with freight or with transportation. In many of them the distinction is very marked. In some there are limits assigned to charges for transportation, but it is always by apt words, never denominating such charges tolls.

For these reasons I am clearly of opinion that the proviso to the twentieth section of the act of April 4th, 1833, has no application to carriage of passengers or property by the company, and that there is no restriction upon the rates they may charge for roadway use and transportation by themselves. Probably it was deemed unnecessary to impose any such restriction. Excessive rates were guarded against by giving to the public a right to put their own cars and vehicles upon the road without danger of being driven off by exorbitant tolls; and it was well known that competition in carriage of property was inevitable, because a canal had already been constructed, and was in successful operation between Philadelphia and Pottsville. Still another consideration may well be supposed to have had importance in the mind of the Legislature. It was, in 1833, impossible to tell, from the knowledge then possessed, at what rates transportation of passengers and property upon a railroad could be carried on.

I have been referred to a number of English cases which, it is argued, show that a different meaning has been given by the Courts to the word "tolls;" from that which I think it bears in our act of Assembly. It is urged, also, that these cases, with a few cited from the decisions in this country, rule that the company can charge for nothing else than for tolls. I have examined all these cases. They have very little bearing upon the question now before me. The English decisions are upon acts of Parliament—very unlike our act of Assembly. Some of them relate to improvement (canal or railway) companies, which had no corporate right to transport. Their sole function was to make or maintain a canal or railway. They were not authorized to become carriers Many English railway companies are created which merely own their roads. They are not allowed to be transporters. Of course they could make no charge except for passage over or through the ways constructed by them. They have no claim to anything but tolls. They render no service, and which is not to be overlooked in studying these cases, under the "Railway Clauses Consolidation Act," section second, the word "tolls" is defined and declared to mean much more than its ordinary legal meaning, and much more than it has ever been understood to signify among us.

These cases do show, as do the American cases cited, that a canal or railroad company authorized to build a canal or railroad, and to take toll upon goods or passengers transported thereon, can demand no other tolls than such as are allowed to them by the statutes under which they exist. I do not now call that doctrine in question. Applied to this case it means that the Philadelphia and Reading Railroad Company cannot rightfully demand, from those who carry over their road, more than the acts of Assembly allows. For the use of their way by others no other tolls than such as are allowed, either expressly or by necessary implication, can be tolerated. The right to charge tolls at all is not expressly given, but it is an inevitable inference from the words of the proviso to the twentieth section.

But it is said the act of Assembly gives no power to charge and collect for transportation, and that the right to charge tolls for liberty of passage excludes any right to demand compensation for services rendered in carrying or for cars and motive power. In support of this is urged the familiar doctrine that corporations have no other rights than such as are expressly given, or given by necessary implication. I recognize the doctrine, and this raises the question whether the right to charge for transportation is necessarily implied in the grant of powers confessedly made. It is clear, as I have already noticed, that the defendants were incorporated not only as a railroad company, to prepare and maintain a highway, but as a transportation company. The regulation and restriction of tolls relates to the former exclusively. No provision was made respecting rates and charges for their own service as carriers; but the very purpose of their incorporation was that they might carry. How can they carry without compensation? Authorized to engage in a business, it is necessarily incident to their authority, that they have the rights which ordinarily belong to such a business. As was said by Chief Justice Taney, in one of the cases cited, "the charter must be fairly examined and considered and reasonably and justly expounded. We do not mean to say it is to receive a strained and unreasonable interpretation, contrary to the obvious intention of the grant." To me it seems a most unreasonable construction of the act of 1833, contrary to the intent of the grant, to hold that the Legislature intended to incorporate a transportation company without power to carry on the business appropriate to carriers. Such power is inseparable from a right to demand compensation for their services. The doctrine would lead to most absurd results, and very often defeat the legislature purpose. Can it be that a gas company, authorized to construct gas works and to supply a city with gas, has no right to demand payment for the gas supplied unless the right to demand it is expressly given in the charter? Must a hotel company, authorized to build an hotel and conduct it, receive guests and supply them without charge? Assuredly no. The right to charge is implied in the nature of the business authorized, and I cannot conceive of conducting the business of transportation, without the imposition of rates and charges.

I will, however, pursue this subject no farther. *I am of opinion that the rates, tolls and charges imposed and collected by the defendants are not greater than they are authorized by their charter to impose and collect.*

The complainant has, therefore, no equitable right to injunction for which he asks, nor to any relief. His bill is dismissed with costs.

---

☞ Railway statistics in Great Britain indicate unusual activity. The traffic returns for the week ending February 25th, of the railways in the United Kingdom, amounted to £564,951, and for the same week of last year only £539,150, showing an increase of £25,801. The London and Northwestern stands first with £95,920, and the Great Western and West Midland next, £59,015 of a receipt.

## AMERICAN EXPRESS BUSINESS AND ITS ORIGIN.

BY HENRY WELLS, ESQ.

Second Article.

The idea of a Western Express, which I had suggested to Harnden, did not long remain a mere conception after its rejection by him. The first attempt to run such a line from Albany to Buffalo was made, under my direction, by George E. Pomeroy, in 1841; but being relinquished by him, myself and Crawford Livingston co operated with him in carrying out the project under the name of Pomeroy & Co.

At that time there was no continuous line of railroad or stages on the proposed route, but the express messenger was compelled to travel by rail to Auburn, by stage to Geneva, by rail to Rochester, to Lockport by stage, and thence to Buffalo by private conveyance; or from Rochester to Batavia, by rail, and thence to Buffalo by stage. The through trip occupied four nights and three days at the quickest attainable rate of traveling. For eighteen month I performed the then multifarious duties of express messenger and agent, as well as those of proprietor; for two thirds of that time I did not lose a trip, and out of twenty-one nights, I have spent eighteen on the road.

The trip between Albany and Buffalo was at first made only once a week; then twice a week; and in 1843, we undertook to maintain a daily communication. The perils encountered, the hardships endured and the difficulties overcome in carrying out our plan, can now scarcely be imagined by those who travel in comfortable cars on well managed railroads, or in convenient coaches on roads which may be generally called decent. But at that time the railroad and all its appurtenances were in their crudest form. The line was laid with a "strap rail," which, as you doubtless well know, was nothing more than a flat bar of iron spiked down to the sleepers, and afforded no very great security against "running offs." The spikes, too, were continually getting loose, and under the pressure of the passing train, the rails curved upward, and in the form of "snake heads," often tore through the bottom of the cars, to the imminent peril and sometimes serious injury of the limbs and lives of the passengers. The common road (of which one hundred and fifteen miles by one route, and sixty-five miles by the other, had to be traveled by the express messenger) was in summer *endurable*, but for the greater part of the year simply *horrible*.

So little encouraging was the prospect of a remunerative business, that for more than a year after the Western Express commenced running, one carpet sack held all the valuable packages, and a medium sized trunk all the rest of the freight. For a long time the receipts for packages conveyed did not cover the messenger's traveling expenses; we therefore endeavored to increase our business by conveying fruit, fish, lobsters and oysters, and by affording every possible accommodation to bankers, farmers, fishermen, and store keepers on the route.

In 1842–3, the United States Special Mail Agent on this route proposed to us to avail ourselves of the United States Mail accommodations, but we declined his overtures. Thereupon Enoch J. Humphrey, who was employed as special bank messenger to make the exchange between the banks, undertook to carry on an opposition, using the mail cars and coaches for his freight, and the mail agents as his messengers. Notwithstanding, however, the advantages he enjoyed as bank messenger, and through his connection with the United States Special Mail Agent, his scheme failed after one week's trial.

In 1842 this express company undertook the delivery of letters along its route at a charge of only one-fourth of the government postage. It very soon obtained a large portion of this business, and the Government, in the hope of defeating the enterprise, commenced a series of vexatious arrests and prosecutions; but public sentiment and the influence of prominent men were so overwhelmingly on the company's side, that the suits were unsuccesful, and the Government was compelled to procure the enactment of a law which reduced the rates of postage to about one fourth of what they had been. The company's experiment, however, demonstrated the possibility of profitably carrying letters at low rates; and to this express company, more than to any direct agency, are the people indebted for the *decreased* cost and *increased* accommodation of postal arrangements.

At this time there were no railroads west of Buffalo; but in 1845 I undertook, in connection with W. G. Fargo, of Buffalo, to extend the Western Express to Cleveland, Cincinnati, Chicago, St. Louis, and intermediate points. The management of this portion of our business was mainly in the hands of W. G. Fargo, who during the summer availed himself, as much as possible, of steamboat conveyance, but over a large portion of the route at all times and over the whole in winter traveled in stages or wagons. In the winter season it frequently took eight days and nights to travel from Buffalo to Detroit, and though the charge for freight was fourteen dollars per one hundred pounds, the receipts did not pay expenses. In the latter part of 1846 I removed from Buffalo to New York and transferred my interest in the Western Express to W. A. Livingston. Since that time the business on this line has been done under the name of Livingston, Fargo & Co.

In 1846, Livingston, Wells & Co. commenced a European Express, and established offices in London and Paris. This line was united in 1855, with Edwards, Sanford & Co.'s Foreign Express; but in 1858 the business was transferred to the firm of A. H. Lansing & Co., by whom it was for some time conducted.

In 1849, a rival Express was started by Butterfield, Wasson & Co.; but, in 1850, this, the Wells & Co.'s, and the Livingston, Fargo & C.'s Expresses were consolidated into one joint stock company, under the name of the "American Express Company," with a capital of $150,000, which has been since increased to $3,000,000. The business on this line *west* of Buffalo is still carried on in the name of Livingston, Fargo & Co., and that *east* of Buffalo in the name of Wells, Butterfield & Co.

The principal lines of the American Express Company's business are: from Boston to Albany; from New York to Albany, Buffalo, and through the States of Ohio, Illinois, Indiana, Michigan, Wisconsin, Iowa, Missouri, Kansas and Minnesota; from Buffalo to Toronto, Hamilton, London and Windsor, in Upper Canada; and to all intermediate points. Its main trunk line of railroad conveyance is the Hudson River and New York Central Railroads, and the roads connected therewith

Wells, Fargo and Company's California Express was organized in New York in 1852. Its first President was Edward B. Morgan, of Aurora, New York. At that time Adams and Company's Express was the only one doing business between New York and California, and an attempt to establish another company in the face of their formidable opposition and acquired influence, demanded much courage and determination. The first effect of the competition thus inaugurated was the reduction of the rate for merchandise from sixty to forty cents per pound. The Adams Express Company had, at one time, received as much as seventy-five cents per pound.

The association now known as the "United States Express Company" was organized in 1854 with a view to doing a western business over the New York and Erie Railroad, which corporation, however, decided to manage for itself the express business on its route; but the experiment being unsuccessful, the express traffic was transferred, in 1858, to the company above named.

The United States Express Company, having a capital of $1,000,000, does a very large business in the Western States, sending its messengers and freight over the New York and Erie Railroad and all its connections through the States of New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Southern Michigan, Wisconsin, Missouri, Iowa, Kansas and Nebraska.

The "National Express Company" was organized as a joint stock association in 1855. The line of business which it controls was first undertaken, about 1842, by Pullen & Copp, who ran an express from New York to Albany, Troy, and Saratoga Springs. In 1844, they united with an express company doing business between Albany and Montreal; and in 1855, with a rival company bearing the name of Johnston & Co, at which time the amalgamated companies assumed the above designation. The company, with a capital of $250,000, transacts the greater part of the express business between New York and the chief towns of Lower Canada.

Howard & Co's Express runs from Philadelphia. Its business is confined to Pennsylvania.

The Hope Express has a route in New Jersey and Pennsylvania.

The New Jersey Express Company was organized in 1854 with a capital of over $1,000,000. Its route is along the New Jersey and Camden and Amboy Railroads, and it works in connection with the Adams Express Company.

The Eastern Express Co. was founded at Boston in 1857, by the union of three private expresses. It has a capital of $100,000, and its main points of business are Boston, Portland, Augusta and Bangor.

Kinsley & Co.'s Express commenced running, under the title of Gay & Co, between Boston and New York, via Stonington, in 1854, though it still retains its name and organization.

Cheney, Fiske & Co.'s Express runs between Boston, Quebec and Montreal, and into the interior of the States of Massachusetts, New Hampshire and Vermont.

The line of business of the Long Island Express Company is from New York to the various points on the Long Island Railroad.

There are numerous minor companies, none of which, however, are in my opinion sufficiently important to require any specification.

—*R. R. Gazette.*

## IMPORTANT EXPLORATIONS IN ARIZONA TERRITORY.

We find in the St. Louis *Republican* a lengthly and highly interesting letter from Dr. George M. Willing, chief of an expedition fitted out in this city in December, 1863, to explore the gold and silver regions of Colorado and Arizona. The expedition reached San Francisco on the 23d of January, where it became divided in consequence of some misunderstanding, one portion setting out immediately for Colorado. Dr. Willing's portion of the party was detained at Stockton until late in May, when having secured a train of pack animals, it set out across the country for Arizona, taking the route of the middle fork of the Stanislaus to its head, and across the Sierra Nevada to West Walker river, and thence to Big Meadows and San Carlos, on Owens river. From this point the route of the expedition lay by the way of Desert Springs, the San Bernadino Mountains and the Mohave river, to Fort Mohave on the Colorado. From Fort Mohave Dr. Willing proceeded to Prescott, the capital of Arizona, and from thence struck off into the country east, about 65 miles, near to the canon of Agua Fria, where, in what he has designated as the "Bradshaw mining district," he has discovered very extensive and productive mines of both gold and silver. The expedition traversed over 1500 miles of country, mostly through trackless deserts, and suffered many privations, being often without water for one hundred miles or more. Of the country Dr. Willing says:

"The country passed over is two-thirds desert, and from the eastern slopes of the Sierras on the whole trip to the Colorado, the expedition did not see a hundred thousand acres of land that could be made even third rate farming land Millions of acres are composed of volcanic mountain ranges—Lupa, plains of sandy and rocky valcanic mesas—dry and parched up, bearing little else than green wood and artemesia. The latter part of the route was through a better country. From forty miles east of Fort Mohave, there does not exist a better grazing and farming country to the present winter quarters of the expedition. This is a strip of country two hundred miles long by thirty miles wide, well timbered and water in abundance by digging wells. There are no flowing streams that are regular; it offers great inducements to emigrants and persons seeking a home in a new country. Although it is surrounded by deserts, it is an oasis and retreat from the turmoil and din of civilization.

"The expedition discovered a natural pass for the great Pacific Railroad, which avoids the Sierra Nevada Mountains entirely. The line of this pass or route is from Los Angelos to the Owens lake, on easy grade, thence up that river to the Big Pine, thence east to Deep Spring Valley, on the trail of the expedition to Providence Springs, thence across the Great Death Valley to Santa Clara, Los Vegas, Parowan, Provo lake, Berthoud's Pass *via* Central City, Denver to Junction City, Fort Riley. Between the Big Pine creek and Owens river and Los Angelos, there is not a hill to cross. The grade is not over 20 feet to the mile. The resources of the country through which the road passes are not enticing.

"During the trip of the expedition, numerous ruins of ancient settlements have been met with; broken pottery is found strewn over all the parts traveled over. Ancient forts, situated on highest peaks of hills and mountains, are numerous, and towns of considerable size are seen in almost every valley of note throughout the entire region of Arizona, proving that the country was settled in former times by a better and more industrious race than the present tribes of thieving Indians. It is not much a matter of speculation to define the causes which annihilated the people who have left such marks of civilization behind them. Volcanoes of more force than Stromboli or Vesuvius, that destroyed Herculaneum and Pompeii, and buried those great cities deep beneath its flowing lava and showering ashes, existed here, and it is probable that the broad and lengthy volcanic mesas, the surface of which is covered with lupe, may conceal in their great depths cities of greater magnitude in Arizona.

"These volcanic eruptions happening at different periods, and loosening the earth's crust, together with the upheavel of the igneous rocks, have created immense seams in the rocks, and the disintegration of the rocks so upheaved formed a light porous soil. Consequently, one reason for the non-existence of flowing streams outside of the Great Colorado basin, the majority of the water being carried off by underground rivers. The task of boring artesian wells will produce an abundance of water wherever needed on desert, plain or valley."

In reference to his discoveries in the Arizona region, Willing says:

"The New Catorce Mine is situated eight miles east of the mining town of San Carlos, on the Owens river, near the line of California and Arizona. The mine is chloride of silver in masses two thousand yards long by one hundred feet wide, constituting one of the most extensive and valuable mines on record. Its top ore assays silver 73.10, chlorine 26.90, or nearly 75 per cent. silver It is the southern crop of the great Washoe veins, and is named New Catorce from its similarity to the mine of that name in Mexico. The Lnnnsberry Gold and Silver Lode is 110 miles east of the Catorce in the northeastern corner of Arizona. It is very rich in gold, and silver crops distinctly for over a mile, sending off numerous spurs, and is the southern crop of the Reese river mines. This mining district is ten miles square, and contains more veins and metal than the Pike's Peak region entire, with better facilities in wood, water and grass, and farming lands. No one is living there at present. The "Ten Mines," in the Bradshaw district, embrace a section ten miles square, but the belt is larger, and contains a number of mining districts. The belt is about seventy-five miles long and fifteen wide, being the largest mining region in the world. The Bradshaw district is new, the only inhabitants being the expedition and about twenty Sonorauians. The following is a description of the 'Ten Mines:'

1. "The *White Swan Lode* is situated in the southern part of the district, crops out large for over a mile, and is from four to ten feet wide. This is a gold-hearing vein, and the cap-rock of the lode shows largely of iron and copper pyrites. It prospects well on the surface in free gold. The deepest shaft on this lode is on the claim called the Ballenciano, worked by Mexicans. The pay-rock is now six feet wide at the depth of thirty-nine feet. The rock pays to the cargo of three hundred pounds crushed in a rude erastor $40, or $250 per ton. This is one of the permanent veins, and is two miles from water and seven miles from wood.

"2. The *Black Swan* is half a mile east of the White Swan lode; varies from four to six feet wide, and crops out for three-quarters of a mile. No shaft has yet been sunk on this vein, the crops being so large as to show its value as a gold-bearing vein. It is very rich in the metal, and the expedition will sink a shaft upon it at an early day.

"3. The *Milling Lode* is an iron lead, and blind. Its crops are not conspicuous. A shaft four feet deep has been sunk on it. It prospects $125 to the ton in gold at this depth. This is a good gold mine; is situated between the Black and White Swan.

"4. The *Aztec Lode* is a mile east of the Black Swan, and crops out large for two miles. Its width is about an average of four feet. Iron and copper pyrites predominate in this ledge, and prospects on the surface $50 to the ton in gold, and $35 in silver. It is a rich mine, and dips in the shape of the letter A. Sulphurets in places will be reached on this vein-stone at a short depth.

"5. The *Great Forks' Lode* is in the northern part of the district. The main body is from thirty to forty feet wide; it sends off four spurs called the North Forks, the Middle Forks, East Forks, and the West Forks; all of these spurs are full four feet wide and perpendicular. The main vein has been prospected for over a mile and shows free gold in abundance, but silver is the predominant metal. The North Forks have been thoroughly tested in sinking a shaft on it only ten feet and a drift twenty feet, reaching the pure sulphurete in place The other spurs have only been prospected on the surface, which shows satisfactorily. This is one of the great gold and silver mines of the age, and is destined to occupy a name in history and add millions of dollars to the currency of the world.

"6. The *Outside Lode* is in the same basin as the Great Forks and east of it. A shaft ten feet deep has been sunk in this lode; it is also an iron lode connected with gold-hearing quartz. It prospects $130 to the ton. The gold and rock resembles the Pike's Peak and Colorado mines. This vein is a blind one, and its crops are only observable from the course its casings take; it is a valuable mine.

"7. The *Wigwam Lode* is also in the same basin, west of the Great Forks' lode, and is about five feet wide. Its cap rock prospects about $100 to the ton. It is also a good mine and separate from the others.

"8. The *Padgen Lode* is an iron vein-stone, mixed with boneycombed quartz, it prospects from the cap rock $75 to the ton.

"9. The *Uno Lode* is between the Wigwam and the Great Forks. Two shafts are sunk on this lode 200 yards apart. The southern shaft is 15 feet down and below the cap-rock. The other is not through the cap-rock. The deepest shaft is now on the richest kind of gold-bearing matrix "Cascalho." This rock will pay fifty cents to the pound in gold. The streak is now seven inches wide, and increasing in width. The vein is now two feet wide, its dip is thirty degrees west, but appears to be righting up. Two erasters are running on this ledge or mine; it promises to be equal to the White Swan, if not better, on account of its being nearest to wood and water. It is the most valuable mine the expedition has, for present purposes, in sustaining it during the winter, for it must be remembered that since the expedition started it has been self-sustaining, and at a cost of $300 a week.

"10. The *Great Eastern Lode* is situated in the extreme northern end of the district, and one mile and a half from camp. The expedition is also working this mine shaft, being fourteen feet down, but not through the cap-rock, which is very rich in gold, and resembles

the Colorado mines very much. This vein is now three feet wide, and increasing, with more of the pay-rock distributed through the cap-rock. This vein, as well as the Uno vein, is traceable for a long distance. All of the veins have their tendency northwest and southeast, and the dip of all, at first, is to the west. At the southern end of the district, the veins of gold-bearing quartz are northeast and southwest, dip to the earth and concentrate there, where they are interrupted and scattered by the volcanic region.

"These constitute all of the discoveries made by the expedition, making, in the aggregate, three large mining districts of as much value each as the mining districts of Washoe and Colorado combined. It must be remembered that Washoe is but seven miles long and only one mile wide, which has given all the wealth and importance to Nevada Territory up to this time. The Colorado district is contained within an area of five miles square, which gives to that territory its own incentive for settlement or emigration. The Hapayamp, the Walkers, the Weavers, the Indian Springs, the San Juan, the Wolsey and the Bradshaw mining districts are all of them larger and better supplied with metals than either of the two Territories named; with more farming lands and other facilities for working the mines. The scarcity of water, and the absence of flowing streams, together with a want of confidence in the resources of the country, are the only drawbacks on Arizona.

"The navigation of the Colorado river is becoming more and more a success. Four steamers carrying passengers and freight are plying between the mouth of the river and the Black Canon or 'Hardy's' Landing and other steamers on the way. The great gold region of Arizona is situated two hundred miles from the Colorado; the most of the land travel is through a good grazing and farming country from 'Hardy's' Landing. From La Plaz there are some short stretches of deserts, being arms of the great Colorado desert, and some sand. 'Hardy's' route is by far the most practicable for heavy freight, but a longer distance by water communication. The Colorado is the only navigable stream in Arizona; all other streams south and east of the Mogolton range sink in the sands of the desert.

"Placer or surface gold mines are very plentiful in all this part of Arizona, but the scarcity of water renders it unprofitable at present to work them. The richest spots are dry, worked by Sonoranians, and sometimes good strikes are made. At Weaver's district, 40 miles from this locality, seven men took out in three days, with their butcher knives, over $40,000 in gold.

☞ The Bear Creek Railroad was chartered by the late session of the Pennsylvania Legislature. It is to commence at a point between a little village on the Pittsburg and Erie Railroad called Sharpsburg, and Greenville, a flourishing town in the western part of Mercer county, near the Ohio State line, where the Atlantic and Great Western Railroad crosses the Pittsburg and Erie road. From this point the line runs eastwardly, directly through the heart of Mercer county, and by the town of Mercer—enters Butler county near the northwest county, and passes entirely across the northern end of that county, to the little village of Martinsburg on the bank of Bear Creek, from which point some two or three more miles of a road will give it a connection with the Mahoning and Franklin road.

## POLITICAL ECONOMY.

### COMMERCE.

The knowledge of the laws and principles which preside over the production, distribution, and consumption of wealth is the science which has been denominated political economy. After wealth is produced, and before it is consumed, the many transactions which take place among men, and which from the producer carries the wealth produced to the door of the consumer, have generally received the name of commerce.

Commerce is an economical fact of a very complicated nature. Its principal element—freight or transportation, sale of goods, either for cash or on time, loan upon them, warrants, credit, etc, and the many questions involved with trade—afford a constant stimulent to human activity, determine good or bad relations between nations, and tax to its utmost the genius of man.

Raynal, the philosopher, says: "I have erected in my heart an altar to four classes of citizens—first, to the philosopher, who is seeking for the truth to enlighten people; second, to the judge, who impartially deals with right and justice; third, to the soldier, who defends his fatherland; and fourth, to the merchant, who enriches it, and is an honor to it by his probity."

Commerce, which gives an actual and tangible value to the products of the earth, is the best bulwark of liberty. The Syrians and the Carthaginians, who carried on the most extensive trade in former times, were exceedingly jealous of their liberty. So were the Italian republics in the middle ages, and the Dutch in the sixteenth and seventeenth centuries. In our day, liberty counts no steadier friends than the Anglo-Saxons, the most mercantile race that has ever existed. A wealthy people can not be easily enslaved or subjugated, because they have something more to defend than their personal freedom. And if it be true to some extent that industry and commerce beget vices and corruption, it could be easily demonstrated, on the other side, that idleness and indolence, with nations as with individuals, are fruitful of more and greater evils.

Modern commerce could not accommodate itself to the slow means of locomotion used by our fathers. Goods have to be transported with the speed of lightning, and new and far-distant outlets and markets are eagerly sought for by every commercial nation. It is probable that the operation of selling goods, stored either in public or private dwellings, and at wholesale or retail, has not yet attained the last degree of perfection; and, moreover, how often it has been altered and improved since the beginning of society, we recently stated in this paper. First, the exchange of goods for other goods was suppressed, and then they were sold for precious metals accepted for their intrinsic value only; afterward, the intrinsic value itself was not considered in an absolute manner. A conventional value was agreed upon by all civilized nations, when a metallic currency was adopted, and again a substitute was soon introduced to facilitate commercial transactions, when bank-bills or paper money circulated instead of cumbersome metallic money.

Loans and credits are the very soul of trade. Merchants can not borrow either from private or public establishments when they have no credit; consequently, they are unable to enlarge the field of their operation. Those, on the contrary, who inspire full confidence, either by their personal respectability or large accumulated wealth, borrow all they want; still, for those privileged persons, there is often, in modern times, an impossibility of borrowing. When there is a panic or a beginning only of a commercial panic, the wealthiest merchants are often unable to use their credit with monetary institutions, and turn into money the notes they have received in payment of goods.

It is certainly a curious fact that the resources afforded by credit fail always when they are most needed. When business is active and prosperous, credit is comparatively easy and money comes freely enough to borrowers of respectability. If there be a slack in commercial transactions, money becomes scarce at once, and just when credit would be necessary to revive them, it entirely disappears.

It is not our purpose to discuss here whether the method of contracting their loans and raising the rate of discount, adopted by monetary institutions in this country and in Europe, in times of commercial uneasiness, is a sound one or not. We simply state a fact, which at first sight seems opposed to logic and economical principles. We said that commerce is the intermediary between the producer and the consumer. Without commerce, the products of the earth would remain in the barn of the farmer; consumers could not supply their legitimate wants, and would ignore the very existence of the luxuries of civilization. Labor becomes paralyzed, and the value of all properties declines when commerce is languishing. Commerce makes people contented, because it facilitates consumption, and it is consumption which promotes the general welfare and diffuses happiness throughout the land. Commerce establishes friendly relations not only between individuals, but between nations themselves, and though the exchange not only of their products, but also of their ideas, it helps the accession of those principles of modern philosophy which see but a family in the diversity of nations. National hatreds, as seen by the experiment now going on between England and France, subside when free exchanges take place among nations; and though we are far from advocating the adoption of free-trade doctrines so long as war distracts our country, we are sure that the United States will not be slow to understand that their present tariff and commercial regulations are but a war measure, and it is as such that European nations and the friends of political economy must look upon them.—*Stockholder.*

☞ The Missouri Democrat says that the damage done the Iron Mountain road by the late freshet is estimated at $100,000. One bridge 140 feet long, another 100, one 140, three 120 feet each, and two 160 feet long, were swept away, and still others greatly injured. In other damage that paper says:

The land slides on the road are numerous; in some places the sides of hills fell down, burying the road under heaps of dirt, rocks and trees. At one point there is a slide of fifty feet in length, the road being covered to the depth of eight feet, with large trees standing erect upon the track. Immense rocks, that for ages have stood poised on the sides of the bluffs, rolled down, crushing the road bed, and tearing up the rails. The slides in the Meramac section are very heavy. In some places the track has been washed away, and at one point half a mile is gone. A large amount of material has been carried off by the flood.

## CHICAGO & ALTON RAILROAD CO.

The Board of Directors submit the following report of the company's affairs and its operations during the year ending December 31st, 1864.

The capital stock and funded debt of the corporation are represented as follows:

| | | |
|---|---|---|
| Common stock | $1,783,100 | |
| Preferred | 2,425,200 | |
| | | $4,208,300 |
| Preferred sinking-fund bonds | 554,000 | |
| First mortgage bonds | 2,400,000 | |
| Income bonds | 1,100,000 | |
| | | 4,054,000 |
| Total stock and bonds | | $8,262,300 |

On the first day of January, 1864, this company commenced operations on the Joliet and Chicago Road, under a lease as per last report, and assumed the liability to pay interest and dividends on the bonds and stock of the company as follows: mortgage bonds, eight per cent. on $600,000. Stock, seven per cent on $1,500,000.

On the first day of April, 1864, the company contracted with the Alton and St. Louis Railroad Company for the perpetual use of the road of that company, as per the terms of an agreement hereto attached, assuming the payment of a fixed dividend of seven per cent. on stock to the amount of $800,000, making an aggregate capital of $11,062,300, represented by two hundred and eighty-one miles of railway, extending from Chicago to St. Louis, two hundred and twenty miles, (between Joliet and Alton,) being the property of this company, and sixty-one miles being held under perpetual lease.

The fixed annual charges from and after January 1st, 1865, having priority over dividends upon the stock of this company, are represented as follows:

| | |
|---|---|
| On Preferred Sinking-Fund Bonds Interest and Sinking Fund | $72,000 |
| On 1st Mortgage Bonds, $2,400,000, at 7 per cent | 168,000 |
| On Income Bonds, $1,100,000, at 7 per cent | 77,000 |
| On Joliet and Chicago Bonds, $500,000, at 8 per cent. and Sinking Fund | 52,000 |
| On Joliet and Chicago Stock, $1,500,000, at 7 per cent | 105,000 |
| On Alton and St. Louis Stock, $800,000 at 7 per cent | 56,000 |
| Sundry liabilities on account of Joliet and Chicago, and Alton and St. Louis Railroads, being taxes, etc., say | 10,000 |
| | $540,000 |

Under the operation of the two sinking funds, the amount of annual fixed charges will be reduced, and under no circumstances can they be increased.

From the foregoing, it will be seen that all net earnings in excess of $540,000 per annum are applicable to the payment of dividends on the stock of this company, amounting to $4,208,300.

The income for the year ending December 31st, 1864, embracing the earnings on 257 miles of road between Chicago and Alton, has been as follows:

| | | |
|---|---|---|
| For transporting— | | |
| Freight | $1,479,659 42 | |
| Passengers | 1,201,615 88 | |
| Mails, exp's, etc | 89.208 66 | |
| | | $2,770,483 96 |
| Less amount charged to account of operating expenses, as per detailed statement (Exhibit D) in Treasurer's report | 1,532,105 53 | |
| | | $1,238,378 43 |
| Add dividends of Alton and St. Stock, held by this company, being part of net earnings | 35,140 00 | |
| Net receipts | | $1,273,518 43 |

The gross earnings for the year amount to $2,805.623 96, or $10,916 82 per mile.

In 1863, the gross earnings per mile were $7,607 75. Gain, per mile, in 1864, $3,309.07, or 43½ per cent.

The net earnings in 1864 amount to $4,955 32 per mile. In 1863, the net earnings were $3,190 29. Gain, per mile, $1,765 03, or 55 3-16 per cent.

The operating expenses for the year 1864, in which is embraced the cost of all structures built and repaired upon the line, as per detailed statement hereto appended, amount to 54 6-10 per cent of gross earnings.

| | | |
|---|---|---|
| The balance at the credit of income account at the commencement of the fiscal year was | $349,741 61 | |
| Add net receipts | 1,273,518 43 | |
| | | $1,623,260 04 |
| Deduct payments charged to this account as per Exhibit B, attached to Treasurer's repor | 882,023 83 | |
| Balance Dec. 31st, 1864 | | $741,236 21 |

At the commencement of the fiscal year, $500,000 in the stock of the Joliet and Chicago road owned by this company was set apart as a fund to be used in acquiring additional rolling-stock, depot-buildings, water-stations, and other structures of a permanent character, to increase the capacity of the line for business purposes. Of that fund $148,214 25 has been expended for the purposes named, leaving a balance of $351,785 75.

In pursuance of the contract with the Alton and St. Louis Company, $800,000 of stock was issued and placed in the hands of this company, as a fund to pay the liabilities of the Alton and St. Louis Company, and to complete their road. Of that amount there now remains unexpended the sum of $74,864 43; leaving in the hands of the company, appropriated for specific purposes, the sum of $426,650 18. Total assets in cash and its equivalent, December 31st, 1864, $1,167,886 39.

The earnings of the line for the past year were reduced by the limited number of engines and cars employed, and also by their inefficient condition during the first half of the year. As evidence of the latter fact, it will be seen that while at all times during the year the demands for transportation were greater than could be met, nearly two thirds of the gross receipts were earned during the last six months.

By a wise provision in the organization of the company, its capital stock can not be increased without the written consent be first obtained from three fourths in interest of its stockholders. In view of these facts, one of two courses must be adopted: the company must either invest an undue proportion of its net earnings in rolling stock and other property to increase the capacity of the line—thus giving those who may hold the stock in the future the benefit of the earnings justly belonging to the present proprietors; or an increase of capital stock must be resorted to, to represent expenditures demanded by an increasing traffic, which must keep pace with the growth of the two great commercial cities at the termini of our line, and the increase of population in the cities and towns, and on the fertile prairies intervening.

It is believed that the latter course should be adopted, and a communication will be addressed to stockholders, requesting authority to carry out a plan which will be therein submitted for an increase of stock, to be limited to actual expenditures made from time to time for the purposes indicated.

## MEXICO AND HER CONDITION.

Since Louis Napoleon undertook to conquer Mexico and substitute there a monarchy in the place of a democratic government, this nation has become more than ever interested in the affairs and destiny of that important section of the North American continent. We may have, when our own domestic troubles are composed, to interfere in that quarter, and re-establish the rule of popular institutions, in spite of the opposition of two of the most powerful empires in Europe. In view, then, of such a contingency, all that relates to the political and material condition of Mexico becomes especially interesting to us just now, and we, therefore, publish the following statistics. Mexico contains an area of 829,916 square miles, and a population of 8,396,524 souls, divided among the different States as follows:

| States. | Total population. | Capital. | Inhabitants. |
|---|---|---|---|
| Aguascalientes | 92 260 | Aguascalientes | 41.974 |
| Colima | 65 097 | Colima | 30.205 |
| Chiapas | 172,578 | San Cristobal | 10.640 |
| Chihuahua | 156,079 | Chihuahua | 13,812 |
| Durango | 471 310 | Durango | 16,014 |
| Guanajuato | 896,588 | Guanajuato | 68,980 |
| Guerrero | 288,616 | Tixtlade Guerrero | 7,809 |
| Jalisco | 815,752 | Guadalajara | 80,918 |
| Mexico | 1,022,356 | Toluca | 18,794 |
| Michoacan | 489,800 | Morelia | 26,109 |
| Nuevo Meon y Coahuila | 233 156 | Monterey | 16,435 |
| Oajaca | 573,100 | Oajaca | 28,720 |
| Puebla | 682 110 | Puebla | 74,103 |
| Queretaro | 148,786 | Queretaro | 24.592 |
| San Luis Potosi | 398 888 | San Luis Potosi | 21,841 |
| Sinaloa | 259 659 | Mazatlan | 12.623 |
| Sonora | 134,300 | Ures | 8,831 |
| Tabasco | 66,616 | San Joan Bautista | 7,300 |
| Tamaulipas | 117,804 | Tampico | 11,214 |
| Tlaxcala | 83,556 | Tlaxcala | 5 634 |
| Valle de Mixico | 246,456 | Mexico | 210.327 |
| Vera Cruz | 273,667 | Vera Cruz | 10,623 |
| Yucatan | 688,294 | Merida | 25 704 |
| Zacatecas | 309,960 | Zicatecas | 22,514 |
| Lower California | 9 845 | La Paz | 2,276 |
| Total | 8,396,524 | Total | 797,682 |

The races are divided, by an intelligent traveler, as follows:

| | |
|---|---|
| Pure White or Caucasian | 2,138,549 |
| Mixed | 6,222,009 |
| Negroes | 35,366 |
| Total | 8,396,524 |

Of this number, 4,799,899 are civilized, and 322,000 wild Indians. The foreign population is estimated at 26,000, the majority of whom are Spaniards; next, the French and English are most numerous. Mexico is divided into twenty four States and the Territory of Lower California. These are subdivided into seventy eight districts and two thousand seven hundred and eleven municiplities, containing ninety-nine cities, two hundred and fifty-one towns and three thousand five hundred villages. The character of the surface is designated as follows:

| | *Square leagues.* |
|---|---|
| Of arable land there are | 18,630 |
| Of land partly covered | 12,230 |
| Of forests | 4,790 |

| | |
|---|---|
| Of meadows and pastures | 11,236 |
| Of mountains | 8,134 |
| Of lakes and ponds | 4,240 |
| Of rivers | 8,710 |
| Of eligible building sites | 10,365 |
| Of uncultivated lands | 62,822 |
| Total of square leagues | 141,247 |

The total value of the agricultural products of the country is placed at $104,933 679 per annum, while other sources of domestic industry yield a yearly income of $20,000,000. The product of the mines is about $10,000,000 per annum, of which $22,000,000 in gold and silver were exported during the past five years. The mineral products of Mexico consist of alum, antimony, arsenic, amethyst, alabaster, argil, agate, coal, cobalt, copper, rock-crystals, diamonds, emeralds, flint, gold in quartz, and placer gold, granite, gypsum, iron, jasper, lead, limestone, loadstone, magistral, magnesia, marmor—white, green, red and black—nitrate of potassium, ochre, onyx, precious opals, potassium, porphyry, quartz, quicksilver, ruby, saltpetre, native salt, silver, white, green, and blue slate, sulphur, talc, topaz, tin, turquoise, vitriol, zinc or zinc ore.

The commerce of Mexico is limited to the exportation of tropical products to the annual value of $2,216,000 and the importation of all kinds of manufactures to the extent of about $30,000,000 yearly. More than one-half of this trade is with the United States and England. The money in circulation is estimated at $100,000,000.

The national debt of Mexico is $172,994,892; yearly national revenue, $20,306,612; expenditures, $23,459,102; showing an annual defict of $3,150,490. The national debt is of two kinds—interior and foreign. The former, amounting to $46,000,000, owes its creation to the wars of independence; the latter, of $126,944,892, was contracted in England, France and Spain. The national debt of $51,208,250, contracted in 1825 with London capitalists, pays at this time 25 per cent. interest; and the national debt pays no less a rate of interest than 24 per cent. Altogether, Mexico pays no less than 87 per cent. of her yearly income for interest, which, in other words, absorbes one-third of the total revenue of the several States. Mexico has been fruitful in revolutions. During her forty years of independence, the government has been changed no less than forty-six times. Santa Anna was re-elected twelve times in a period of ten years. The government was first changed from the Empire into the Triumvirate; then into the Federation; then into the Central and Absolute Dictatorship; then into the Elective Presidency, and now again into an Empire.—*Petroleum Journal.*

## ALLEGHANY VALLEY RAILROAD.

The annual meeting of the stockholders of the Alleghany Valley Railroad was held in Pittsburgh recently, when a highly interesting report was presented, showing the operations of the company for the past year, and the meausres contemplated looking to the extension and increased usefulness of this very important road. The earnings of the road for the year ending the 31st of January, 1865, were $256,507, and the expenses $203,539, leaving a balance of $52,968, which has been expended in equipment, tools, etc. The construction of a branch road, connecting the Alleghany Valley with the Pennsylvania Railroad, has been delayed, but will now at once be prosecuted, under a resolution to that effect adopted by the stockholders. The work on the ten miles of road between Kittanning and Mahoning Creek, though partly under contract, has made but little progress, in consequence of the high price of labor. The total payments for labor done amount to $106,390. The report refers in detail to the measures adopted for the early extension of the road to Franklin; that enterprise, owing to the financial embarrassments of the Alleghany Valley Company, having been committed to the hands of the Mahoning and French Creek Railroad Company, chartered for the purpose and acting in conjunction with the Alleghany Vally Road By this arrangement, the latter road receives thirty-five per cent. of the gross revenue from all the additional trade which the extension will bring upon it. The arrangement will also materially aid the company in completing their ten miles of road between Kittanning and Mahoning. The report concludes with the following interesting exhibit of distances, based, so far as the extension of the road is concerned, on surveys made during the year.

The distance from Pittsburgh to Franklin, by the river line, surveyed and located, is :

| | miles. |
|---|---|
| From Mahoning to the Bridge and Town of Franklin | 60 3 10 |
| From Pittsburgh to Mahoning | 54 |
| From Pittshurgh to Franklin | 114 3-10 |

There is no ascending grade from Faanklin in the direction of Mahoning, and the maximum aseending grade northward is but two and a half feet per mile. The maximum grade southward from Mahoning to Pittsburgh is ten feet to the mile, and this only below Kittanning and for a short distance. The distance from Franklin to Philadelphia is as follows :

| | miles. |
|---|---|
| Franklin to Kiskiminetas | 84 |
| Kiskiminetas to Blairsville Junction | 33 |
| Blairsville Junction, P C. R. R., to Philadelphia | 302 |
| | 410 |

The distance from Franklin to Philadelphia, via Titusville, Corry and the Philadelphia and Erie road, is 465 miles. The distance from Franklin to Philadelphia, by the proposed New Castle and Franklin road, the Fort Wayne road, and the Pennsylvania Railroad, as stated in the last report of the engineer of the New Castle and Franklin Railroad Company, is 454 miles, showing a difference in actual distance in favor of this line over any other yet projected of 35 miles.

The distance from Franklin to New York, via the Atlantic and Great Western and the New York and Erie Railroads, is:

| | miles. |
|---|---|
| Franklin to Meadville | 28 |
| Meadville to Salamanca | 101 |
| Salamanca to New York | 414 |
| In all | 543 |
| From Franklin to Philadelphia by your route is | 419 |
| Philadelphia to New York | 98 |
| Total | 517 |

The difference in favor of Alleghany Valley and Pennsylvania route through Philadelphia, twenty-six miles.

☞ The bill granting the right of way through the State of Delaware to the Columbia and Port Deposit Railroad Company has passed both branches of the Legislature of that State.

## STEAM COMMUNICATION WITH EUROPE.

We are gratified to learn that arrangements have been completed by which, in a very short time, Philadelphia will be placed in direct steam communication with Liverpool. The enterprise is chiefly in the hands of Liverpool merchants, and in some measure an experiment; but nevertheless, in the absence of such a line as we ought to have had years ago, even the project is important, because only needing encouragement to insure success and permanance. Our mercantile community and capitalists have been lamentably short-sighted in reference to our foreign commerce, and particularly as regards steam communication with Europe; and it is by no means creditable to their enterprise, that with our important lines of internal communication, by which the control of the trade of the west and lakes might be secured and brought to our warehouses, if we had them, we are dependent solely upon foreign enterprise and foreign capital for the means of shipping these vast supplies to the markets of Europe. The establishment of a steam line and the erection of capacious warehouses should have followed closely the completion of the Pennsylvania Railroad; but often as the effort has been made our merchants have not yet been aroused to the importance of such an undertaking. They recognize and boast the fact that we have the means to build sea-going steamships of the first class, and the resources of manufacture and the extensive internal trade necessary to their profitable support, but there the whole matter ends. We trust sincerely that this apathy is not to be of longer continuance, but that this new line, with the increased facilities of trade afforded by the opening of the Philadelphia and Erie road to the lakes, will receive, although established by foreign capital, such a measure of encouragement from the mercantile community as will speedily lead to the substitution of larger and better ships, and thus establish a permanent line in which Philadelphia merchants shall at least have an equal interest with those of Liverpool.

It is understood that the first ship of the new line will leave Liverpool on Saturday next, the 8th inst, for Boston and Philadelphia, and that the departures from Liverpool will be on alternate Saturdays from that time. The ships will sail direct from Philadelphia to Liverpool on every alternate Wednesday, commencing May 3d George Warren & Co, are the Liverpool agents. The agents in Philadelphia are A. R. McHenry & Co., 112 Walnut street. The ships comprising this line are the Propontis, Hellespont, Gambia and Fairmount, all of 2500 tons and 350 horse power. The first two, we believe, were built for the Mediterranean trade, to run against the *messageries imperiales*, and the third for the Southampton and African line, and all are represented as staunch sea-going vessels, though not of the first class.

☞ About 2,000 Germans, fresh from Fatherland are on their way from New York City to work on the Atchison and Pike's Peak railroad. The company has hired them, agreeing to pay them partly with twenty acres of land apiece, out of the late Kickapoo Reservation, thus forming an important and valuable colony of industrious citizens of our country, and also securing laborers for an important public work, which has been difficult to do.

## ATLANTIC & GREAT WESTERN R.R.

We clip the following from the London correspondence of the New York *Herald:*

LONDON, March 4th, 1865.

Those versed in American railway interests know that the Atlantic and Great Western Railway—from New York to St. Louis, running through the Pennsylvania oil region—was built by Mr. James McHenry during the last three or four years, and largely by British capital. Some eight or ten millions of dollars or more were raised from time to time by mortgage bonds on the different sections of the road, and last autumn fourteen millions of dollars, or two millions eight hundred thousand pounds, were asked for on debentures of the entire road, payable at eight per cent. in three years The transaction was promoted by Overend, Gurney & Co., the Kennards, and Mosely, of Liverpool, while the character of the road was endorsed by Sir Morton Peto, who had an engineer to overlook the building of the entire track. Now, when you bear in mind that Mr. McHenry is a thorough American and an upholder of the old flag throughout the length and breadth of the land, and that every possible effort has been made in every quarter to damage American credit and American finances, you can have some conception of the way that heaven and earth have been moved to defeat this loan.

The committee of the Stock Exchange first made the contractor send to America to get the separate endorsement of each section of the road, before they would appoint a settling day. In addition to the most nefarious efforts to destroy American credit, many of the unscrupulous speculators of Capel Court tried illegitimate speculations, and got "cornered."

The following paragraph from the money article of a leading paper here this morning shows the motives that have actuated some of the lame ducks:

"In the share market there has been no particular feature, except a further rise of three-fourths in Atlantic and Great Western debentures, the settlement in which took place to-day. A severe opposition to any settlement being granted in these shares was organized some weeks back in the Stock Exchange, and it now appears that many of the dealers in that establishment must have sold more of them than they could hope conveniently to deliver."

What has been the result? The loan has come out triumphant, and stands to-day at five and one-fourth per cent. premium! Now, setting aside the individual interests concerned, had this loan been defeated, it would not only have had a most depressing effect on American railway, commercial and national interests, but it would have been referred to as an abortive effort of Americans to raise money in England. There has been the strongest rebel and tory combination to defeat this loan, but they have ignominiously failed, to the intense mortification of the concoctors. It is only a part of a grand scheme to utterly ruin the future credit of America and Americans in England. The victory is a two-fold one, and quite as great as the ones gained by Sherman, Porter, Foster, and Thomas, at Charleston, Wilmington, and Nashville. With this salutary lesson, I doubt if another such nefarious transaction will be tried upon a similar occasion in future.

## MONETARY AND COMMERCIAL.

The past week has been one of the most momentous in the history of our country, and will have an influence on its destiny as a nation second only to the happy completion of the Revolutionary struggle. Victory has followed victory in such rapid succession that it has scarcely left time enough between them to think of the results of each, but this alone has settled upon every mind as the grand and glorious result of them all that the Rebellion is crushed, the nation free, and our standing among the nations of the earth not only vindicated, but we are placed by it in the foremost rank of the great and powerful families of man. Let not this fill us with pride and haughtiness, but rather let us take warning by the history of other nations that have been elevated to a similar pinnacle of fame, and instead of indulging in riotous blasphemy, let us in our joy devote our minds and energies to thanksgiving and praise to the "Dispenser of every good and perfect gift," showing the genuineness of our feelings by doing all in our power to aid the innumerable sufferers who have sacrificed their earthly hopes to secure us the glorious result. As business men, we have to look the fact in the face that as a nation we are in debt, and that we must devise the ways and means for its liquidation. This is a subject that can not be treated flippantly, but will tax the energies of the nation, and will compel us to put restraints on business, that before we have been unaccustomed to. It should lead us, not only as a collective body of people but as individuals, to economy in the use of articles of foreign production, but should also inspirit our energies with new vigor in developing to the fullest capacity the resources and hidden, undeveloped wealth of our whole country. Grave questions of political economy and governmental science will for some time fully occupy the attention of the nation, and while we may contemplate and inflict merited punishment to the guilty leaders, let all our acts be tempered with mercy.

The week to come is also big with events, any hour of which may bring us the news of the fall of Mobile and the capture or surrender of Gen. Joe Johnston, and the consequent destruction of the last vestige of the shadow of a hope on the part of the rebel leaders. These things had their legitimate effect upon business, and but little has been done, prices are unsettled and can not be expected to assume their proper equilibrium until all is over.

The fluctuations of the gold market have not been so great as many anticipated, the effect of the present news on the status of the precious metal as an article of merchandize had been mostly realized in the previous fall. The daily changes have been,—

| | Opening. | Highest. | Lowest. | Closing. |
|---|---|---|---|---|
| April 5 | 148 | 153¾ | 148 | 153¾ |
| " 6 | 151¼ | 152½ | 150½ | 150½ |
| " 7 | 150½ | 140½ | 147 | 147 |
| " 8 | 148⅓ | 150½ | 148⅓ | 150¼ |
| " 10 | 144 | 146 | 144½ | 144⅝ |
| " 11 | 146½ | 147½ | ..... | 146⅞ |

There was no material change in the early quotations from Wednesday's transactions.

There has been a heavy demand for money during the week, with but a limited ability on the part of bankers to meet it; it is hoped, however, that this pressure for money will soon find full relief from the result of the Government adopting the course indicated by the following telegram addressed to the President of our Chamber of Commerce, and read on 'Change on Monday last.

WASHINGTON, APRIL 10.

*Geo. F. Davis, President Chamber of Commerce:*

The Secretary of the Treasury is exerting himself to provide funds to meet the claims of the Quartermaster's Department, and is paying those who are willing to receive Government bonds. I am not aware of any other measures that can be taken to discharge the Government indebtedness.

E. M. STANTON.

The Exchange market is close, and balances have to be maintained by remittances of currency. The following are the quotations:

| | Buying. | Selling. |
|---|---|---|
| N Y. Exchange | 50@75c ℘ M. | 1-10@¼c prem. |
| Philadelphia | 50@75c ℘ M. | 1-10@¼c prem. |
| Boston | 50@75c ℘ M. | 1-00@⅛c prem. |
| Baltimore | 1-10c dis. | par. |
| Gold | 44@45c prem. | 47c. prem. |
| Silver | 33@35c prem. | 36@38c. prem. |
| Vouchers, c'ty | 3@9c dis. | |
| Vouchers, country | 8@15c dis. | |
| Certificates | 3c dis | par. |

PHILADELPHIA AND ERIE RAILROAD.—During the recent flood five spans of the Philadelphia and Erie Railroad bridge at Williamsport were swept from the piers. Also one span of the bridge at Montgomery, near Muncy. Also one span of the Kettle Creek bridge, 33 miles above Lock Haven. All these disasters to the Philadelphia and Erie Railroad bridges were caused by common road bridges, which were dashed against the railroad bridges with irresistible force. A few other bridges were slightly injured in their piers or abutments, but all these were promptly repaired.

☞ A few days since a lady recovered in a New York Court $2,500 against a Passenger Railway Company, for starting the cars before she had stepped safely to the ground. The papers give this case as a warning, but we would be glad to know the extent to which companies would be held liable for the slowness of dilatory passengers? When the passenger is feeble, allowance is to be made, but everybody should remember that he and she must be awake when they have anything to do with railroads.

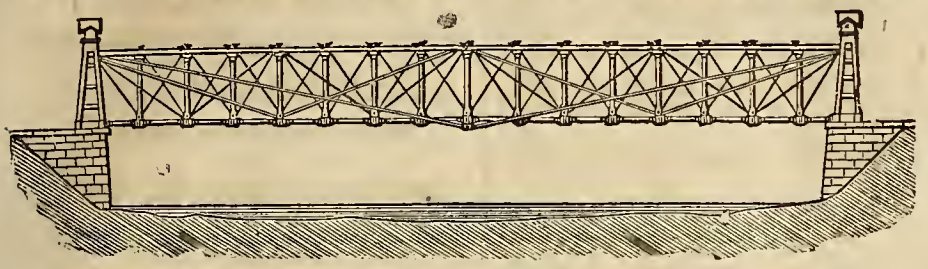
WRIGHTSON & CO.

BOOK & JOB PRINTERS,

167 Walnut St.

CINCINNATI, OHIO

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

**For plans and particulars, apply to**

mar. 5, '53. 1y. **Letter Box, 1393.** **C. J. SCHULTZ, Pittsburgh, Pa.**

---

**HOLENSHADE, MORRIS & CO.**

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

**CINCINNATI.**

**BRIDGE BOLTS,** Rivets [illegible], Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27,1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done By these means the maximum useful effect of the power is secured, with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotives.

419 y 1

---

**KNOX & SHAIN,**

**Engineering and Telegraphic**

INSTRUMENT MAKERS,

PHI[illegible]

---

## JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

Manner, at the Shortest, and on the

**Most Reasonable Terms.**

---

Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

**MACHINE SHOP**

SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

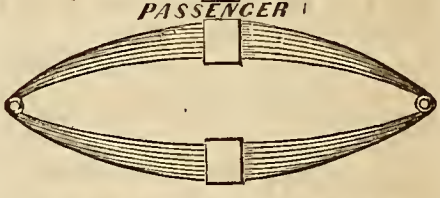
RAILWAY SPRINGS.

**FREIGHT**

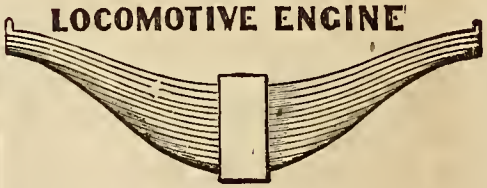




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS.**

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI, O.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

**W. M. F. HEWSON,**

## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY

W. P. SMITH. *Master Transportation, Baltimor*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE. *Gen. Ticket Agent. Baltimore.*

## ittle Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin & Chicago Air Line Express | 7 00 P. M. | 2 35 A. M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A. M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St. Louis and Cairo Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

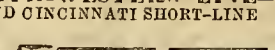
☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M lstreet

C. E FOLLETT,
General Ticke Agent.

W D. GRISWOLD nera' Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:20 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

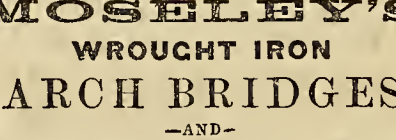
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2 MOSELEY & CO.
BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

THE SCHENECTADY

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches for same. &c.,

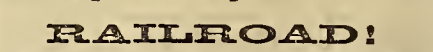
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express.

On Sundays, 10.24 P M.

☞Through connections made for all points East and Wes

WM. TEARNS Supt

The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, APRIL 20, 1865.

## DEATH OF WILLIAM WRIGHTSON!

WILLIAM WRIGHTSON, for several years one of the proprietors of this paper, and brother of the present proprietor is dead. Intimately acquainted with him, and knowing his labors in the public service, we make this brief memorial, not only in rememberance of his character, but, in justice to his merits.

MR. WRIGHTSON was born in the City of York, (England)—in March 1827, and was at the time of his death (February 17th ultimo) 37 years and 11 months of age. Arriving in this country in 1832,—William was educated in Albany (N. Y.)—where his father settled. His principal teacher was Dr. Bullions, well known to the public, as the author of several Text books. Of this gentlemen, William always spoke, with the greatest regard,—and of his teachings availed himself with great profit. His range of studies were not very wide; but in them he was well educated. While yet young,—he became himself a teacher and a successful one. He taught school for several years, and had also several private pupils. Among them was Mr. FREDRICK SEWARD, (Son of the Secretary of State) who has barely escaped death by assassination. His teacher was less fortunate; just before having perished by the hands of savages. In January 1854, William moved to this city, and joined his brother in the publication of the *Record*. In this, he was not merely pursuing a business; but, entering heartily into some of the best, and most important public enterprises. Among these was the Pacific Railroad,—in which he always took the greatest interest. In the long, arduous, and persistent effort, which the *Record* has made,—and is recorded in its columns,—to favor the endowment and construction of that great work,—WILLIAM WRIGHTSON did his full part, by pen,—by word,—effort and enterprise. It was, perhaps, the investigation on this subject, which led him to a knowledge of the vast mineral resources of what is now Arizona, and induced him to take an interest in them. This finally led to the formation of the Sonora Ex. and Mining Company, in which he had a large share. To acquire acurate information and set the work in operation, he accompanied a party of American miners and explorers to Tubac and the neighboring region. In the defenceless state of that country, the miners beset by Indians, and Mexico marauders, were obliged, for the time being, to give up their enterprize. Returning to Cincinnati, Mr. WRIGHTSON entered on commercial business; but very soon gave it up,—and again engaged in endeavoring to revive his mining operation in Arizona. The Santa Rita Co. had been formed in which he had a large interest; but, till the Government provided a defence for miners nothing could be done. Mr. WRIGHTSON engaged actively in endeavoring to obtain the laws and aid of Government necessary to this purpose. He visited Washington and became personally acquainted with nearly all the members of Congress. At length the Territory was organized, and the measures taken, which it was supposed would develop the country, and give security to life and property. Mr WRIGHTSON having a large interest in the mines, proceeded there, as soon as protection could be offered, to superintend and engage in the development of this mining property. He was appointed the special agent of the Post Office Department, although without compensation,—and seems to have enjoyed the full confidence of all who knew, and were associated with him. In that country, in spite of all that can be done, by Military Posts,—there is constant danger from the wild and predatory bands of Indians, who infest the whole region, on the border of Mexico. From this cause, he met with his death On the 17th of February, he left Tubac, to visit Fort Buchanan, and other localities, in company with G. W. HOPKINS, of New York City, (who was likewise killed,) for the purpose of making some explorations and attending to other business, in which Mr. H. was more particularly interested, intending to return in a day or two. It seems, that on the same day, Fort Buchanan, garisoned by only a small squad of men, was surrounded, by a band of the Apache Indians and captured but a few minutes before their arrival. This Mr. W. and his companions could not know. At a short distance from the fort, the road entered a very narrow defile,—a hill and rock on one side and tall arrow weeds on the other. In this defile, the bodies of Mr. H. and Mr. WRIGHTSON were found, the latter pierced with both arrow and lance. It seems,—that they were entirely surprised,—that Mr. H. was killed in advance,—and that William turned to escape the ambush and reach a place tenable for defense but failed;—falling, murdered by savage hands.

So fell our friend. We knew him long and well. He was not only kind and amiable in disposition, but very pleasant in his manners, commending himself to the friendship of all who knew him. He was genial in spirit,—perfectly upright in character, and remarkably intelligent. Ready to perform any duty, he was equally fearless in the performance. The loss of such a man is a loss to the country. It will be felt, not only by his friends,—but, by the young and rising Territory, to which his latter years have been devoted.

M.

## DEATH OF PRESIDENT LINCOLN!!

A great crime has been committed! A great sorrow follows! A great man has fallen in Israel, and the Nation mourns! Never in this country was such a mourning since the death of Washington; and it was not such a mourning then; for the nation was then an infant compared with its present giant magnitude. Now a great nation mourns and laments throughout the wide extent of this great land! The flags, which but yesterday streamed in the light and glory of joy and victory, are to day dressed in the sable insignia of woe! The churches are hung with it; the dwellings are hung with it; the vessels are clad with it; and the people go through the streets with downcast looks! Why is this! Why do the people mourn over one man? Man is mortal; nations may live.

This Government will stand, though all its officers should die. The Constitution and Laws provide for an indefinite succession of the Presidential Office, and since the people have made and carry on the Government, they can provide for any default, which, in spite of any human foresight, may occur. There is no danger to the Government or any legal institutions. Why then do the people mourn so sadly and so greatly? The reasons are ample, and belong as much to the personnel as to the public sympathies of our human nature. In the first place the event itself is sad in the extreme. No one can leave this life in a more sad and mournful manner. To be assasinated, and to be assasinated without cause, when his whole life had been an illustration of whatever is aimable and humane, is an end, which, to all beholders seems, most lamentable. Then, there was a deep feeling that the blow of the assassin was directed at the American People, and, in fact, struck them when it struck their representative head. This brings us to the main feature in Mr. LINCOLN's public character. He was in every sense a representative of the American people. No man who ever came to the head of this nation was so really, fairly, truly, a representative of the people, as LINCOLN. His early life was hard, and passed among the classes of men who make the great masses of the nation. He knew their wants and sentiments. From his early education he passed into that of professional life. The practice at the bar gave him farther experience in human nature. Through all this experience, and from the most humble walk, he was raised to the highest office of Statesmanship. In all these he has never failed in that sagacity, that practical knowledge of affairs, and that direct mode of action, which is at once the wisest elements of the Statesman, and the most direct way to the confidence of the people. Mr. LINCOLN was intellectually the embodiment of that common sense which

"Though no science is fairly worth the seven."

Many men were more learned, more elo-

quent, more brilliant; but not one among them could have represented the people—or conducted affairs—as well in this great crises. He was not quick to act, because he could not act effectively till the nation had come up to the position he wished to take; and then he never hesitated; then he was equally ready and energetic.

There was another quality which endeared Mr. LINCOLN to the people. He was emphatically what the poet meant when he said:

"An honest man is the noblest work of God."

The people called him "*honest old Abe*;" and they meant a great deal more than mere honesty. He had that honesty, fairness, directness of character which commands every man's confidence, and which in public opinion, covers almost every error. And now when Mr. LINCOLN has gone to the grave, this feeling that he was indeed so honest and so humane, brings his opponents, as well as his friends, in sorrow, to mourn over a departed friend. He will appear historically as in life, the Preserver of a Nation, and in death, the Martyr of Freedom. He will appear at once great and good. His fame will grow greener as history records how vast were his responsibilities; how fearless he met them; how nobly he discharged his duties; how gloriously he won the victory for his country, in that great battle in which he was made, by Divine Providence, Leader and Commander. In that Providence he trusted, and not in vain. God was his shield and his defense; and we trust has borne him to the realm of immortal Felicity.

## PROSPECTS OF AGRICULTURE.

### STATISTICS OF OHIO.

There is nothing more important to a nation than the success of agriculture; there is nothing more important to this country, at present, at least to its physical prosperity, than large crops in the present year. It is now the month of April, when those who are accustomed to observations on nature, and understand the principles of meteorology, can make up their minds quite definitely on the probabilities of good and bad crops; and, strange as it may seem, on those which are yet unplanted. There are two great principles of meteorology which go far to determine what the general aggregate of crops will be when we know what the preceding winter and spring have been.

1. The *average* of temperature and generally of moisture for an entire year are very nearly the same each year. The departures from the general average in any particular year will be quite small. The *inference* from this principle is, that you have the average of a given period, say six or nine months preceding, by deducting from the general average of a year, you get *very nearly the average of the remaining months.* If, for example, the six or eight months preceding the summer of 1865 (this coming summer) should present no *violent irregularities*, there can be no great extremes in the coming summer. This has been the case. From last summer to the present time, there has been no violent irregular weather; and consequently there can be none in the remaining months. The winter has been rather colder than the average, but nothing of any kind in the extreme. So, from Christmas to the 15th of April, there has been a good deal of snow and rain; but nothing extreme. As a consequence of a pretty uniform cold in winter, we have so far a very uniform spring rather warmer than the average. Hence, we can not fairly anticipate (although they may come) very severe frosts. If there be any extreme weather in summer, it will probably be *drouth*, which is a serious thing for Indian corn; but there is no evidence now of any severe drouth.

The observations upon nature and the existing crops correspond exactly with these principles of meteorology. The *wheat* crop never looked better,—never so well. In Ohio a great deal of wheat has been planted; and the fields of this region have come up thick and exceedingly green; promising at this time a very heavy crop. *Corn* will be planted in the beginning of May, and can we judge of what a corn crop will be? We can judge of *probabilities.* In Ohio, the *great* deficiencies of the corn crop have been occasioned by only two causes, 1. A very *raining season* in May and June interferiug with the planting, or washing away seed. This was the case in two seasons of the last ten years. 2. *Drouth* is, perhaps, the greatest cause of injury to the crop. Last year the corn crop was reduced one third by drouth, and the year before also, —and in 1855. Drouth and raining springs have reduced the corn crops in half the years since regular statistics of the crops have been obtained. In reference to these, we may say that the quantity of rain and snow which fell in winter and the early part of spring was so great that it is almost impossible that there should be any excess of rain in May and June The only danger then, will be drouth. But if it should be (as it probably will be a pretty dry period from the 15th of April to the 1st of July) there will be no excessive drouth. On the contrary, the summer will proceed with great regularity. There is greater probability of injury to *hay* than to any other crop. It starts, however, very fair with good roots and deep verdure. 2. It is apparently another law of meteorology that the seasons should move in cycles—one up and one down—each cycle composed of three or four years. In the year 1860, the aggregate of crops in Ohio was greater than in any previous year, and reached 140,000,000 bushels of grain. But from 1860 to 1864, the aggregate grain crop steadily diminished. It probably reached the lower point in 1864, and will from 1864 to 1868 steadily increase. If this be true, we shall have good crops this year, and certainly there is every promise of it. The wheat crop never looked better. The grass is very good, all kinds of fruit are in full bloom, We shall soon see whether the laws of meteorology we have stated are correct. If they are, this will be a very productive year.

Some statistics of the crops in Ohio will illustrate what we have said. The crops of wheat were:

| | Bushels. |
|---|---|
| In 1859 | 13,347,967 |
| In 1860 | 23,640,356 |
| In 1861 | 20,055,424 |
| In 1862 | 29,916,518 |
| In 1863 | 20,452,410 |

The average of five years is 21,400,000 bushels, and we see the crops ascended regularly to 1862, when they appear to have culminated.

The crops of corn were:

| | Bushels. |
|---|---|
| In 1859 | 68,730,846 |
| In 1860 | 91,588,704 |
| In 1861 | 74,858,878 |
| In 1862 | 62,764,887 |
| In 1863 | 54,614,617 |
| In 1864 | 50,000,000 |

The crops of corn increased till 1860, when this State produced the largest crop of corn ever known. It steadily decreased each year till 1864, when it was the smallest known in many years. It will now probably increase for several years.

The crops of *hay* were as follows:

"OF MEADOW AND HAY.—No crop is really more valuable than that of hay. In ordinary seasons, no crop will bring more money than that of hay. Looking to its winter support of the immense number of domestic animals, no crop performs a more valuable service. But the hay crop was reduced in 1863, both in quantity and average, much below any previous year. This was no doubt owing to the drouth in the early part of summer. The following are the results:

| | |
|---|---|
| Acres of meadow | 1,195,560 |
| Tons of hay | 1,095,489 |
| Average per acre | .90 tons. |

The crops of hay during six successive years, were as follows:

| | Acres. | Tons. | Av. p. acre. |
|---|---|---|---|
| In 1858 | 1,357,874 | 1,806,461 | 1.33 tons. |
| In 1859 | 1,340,672 | 1,366,055 | 1.02 " |
| In 1860 | 1,538,562 | 2,027,160 | 1.33 " |
| In 1861 | 1,461,418 | 1,708,201 | 1.16 " |
| In 1862 | 1,570,252 | 2,067,280 | 1.32 " |
| In 1863 | 1,195,560 | 1,095,489 | .90 " |

Here we see that the crops of hay have not followed the law of all the preceding crops. It has not continually decreased. On the contrary, the crop 1862 was larger than that of 1860, and the largest one raised. The last one was the smallest, and so decidedly inferior to all others, that we are struck with surprise. The crop of 1863 is but little over half an average."

We need add no more to these examples It is sufficient to say that the *aggregates* of all the crops went steadily down to 1864, when

they were much below any aggregate for several years. We shall soon see how far general principles may be relied on to anticipate the extent and value of crops.

## CINCINNATI & MACKINAW R. R.

In the year 1853, was published by Edward D. Mansfield (now Commissioner of Statistics for Ohio) the "EXPOSITION OF THE PLAN AND PROSPECTS" of the "Cincinnati and Mackinaw Railroad." The whole extent of the plan embraced a longitudinal and central railroad through the whole United States, from Pensacola to Mackinaw. Mackinaw is the central point of lake navigation, and, although there is now no great city, it is perfectly inevitable there must be one. It is a necessity. The "plan" was accepted and acted upon as far as could be by all interested in it throughout the whole extent of the line. Owing first to the financial convulsion of 1857, and secondly to the war, but little of the actual work has been done; but steps have been taken which insure its completion. The "Indiana and Grand Rapids" Road (of which we have frequently spoken in this journal) is partly graded; the road from Cincinnati to Lexington (which is one link in the general plan) has been made; a road north from Pensacola has been completed; and more important than either,—a large and valuable grant of lands has been made to the roads going through Michigan to Mackinaw. The war has prevented the construction of these roads; but now that the war is rapidly ending, we can see that all the great enterprises which had been abandoned for a time, will be renewed with the certainty of success. The country will be in a state of unprecedented prosperity; and capital, no longer wanted for the government, will be set free to go into all works and enterprises which promises renumeration; and we expect to see the Cincinnati and Mackinaw Railroad completed in a short time.

In 1857 we published at this office an "expnsition" of Mackinaw City, which contained the following statement of facts in relation to the Michigan Railroad:

"It is true that the great railroad movement, which has coasted the Southern shore of Lake Erie, and touched the Southern extremity of Lake Michigan, has not yet penetrated the peninsula of the North West. But can it long be delayed? The Government has already taken such steps as will soon make Mackinaw the centre of a great railroad system. We need only refer to the actual facts in order to make this clear. Congress, by an act passed in 1855–6, granted to the State of Michigan a large body of land for railroad purposes, designating four routes. 1. From Little Noquet Bay to Marquette, in the Superior Country. 2. From Amboy, on the State-line of Ohio, through Lansing to or near Traverse Bay, meaning Mackinaw. 3. From Grand Rapids to Traverse Bay, or near there. 4. From Grand Haven to Port Huron. It will be seen that this plan is formed on the basis of a direct line from Lake Superior, through the mineral regions to Lake Michigan. The law fortunately permitted the last two companies to make their lines at or *near* Traverse Bay, and as Mackinaw is but comparatively a short distance, both companies have wisely concluded to terminate their lines at Mackinaw. It is at once evident that the Michigan line, centering at Mackinaw, must be met *there*, by railroads penetrating various sections of the Northern Peninsula. This is evident, and we understand is already forseen, and measures will be adopted to accomplish that end. In the meantime, let us examine the prospects and influence of the two long lines of Michigan railway, terminating at Mackinaw The whole amount of land granted to the Michigan railways is estimated to be about 3,880,000 acres. From this, however, there will be some deduction in consequence of lands already selected, and which may not be supplied, by the quantity within the limited distance. The deficiency will not be great, and we understand that the amount estimated for the two Mackinaw roads will scarcely be less than *two millions of acres.*"

Of the present condition of the work we have been furnished the following facts:

The line of the Grand Rapids and Indiana Railroad extends from Fort Wayne, Indiana, to the Straits of Mackinaw—a distance of 353 miles. South of Grand Rapids there are four natural divisions as follows:

| | Miles. |
|---|---|
| 1. From Fort Wayne to the Air Line Railroad | 28 00 |
| 2. From the Air Line R. R. to Sturgis. | 26 00 |
| 3. From Sturgis to Kalamazoo | 35 98 |
| 4. Kalamazoo to Grand Rapids | 48 35 |
| Total | 138 33 |

The whole cost of building the road is estimated at $7,000,000, or $20.000 per mile, though before the war it could have been built for $15,000. The concern has 1,000,000 acres of land. which should afford $10,000,000. The work already done amounts only to the grading of fifty miles. By the terms of the land grant, 20 miles north of Grand Rapids must be completed before January 1st, 1866, and 20 miles each year thereafter; and before June 3d, 1874, the whole road to Little Traverse Bay must be completed—else the lands will be forfeited for so much as shall not be then finished.

## MANUFACTURE OF AGRICULTURAL IMPLIMENTS IN THE U. S.

One of the most important improvements made in the useful arts, in modern times, is that made in agricultural machinery. The recent volume of U. S. Statistics published on "Agriculture" gives us some statistics of this branch of business, which are quite interesting. We subjoin a tabular view of them. It appears, that the largest establishment for the manufacture of agricultural implements is at Canton, Ohio. The principal one is that of Aultman & Co., Canton. C. Aultman & Co. made, in 1864, no less than 6,000 mowing and reaping machines. We give below the account of this branch of industry, from the U. S. Statistics.

*Statistics of Agricultural Implements produced in the United States during the year ending June* 1, 1860.

| | No. of establishments. | Cost of Labor | Value of product. | Value of product in 1850. |
|---|---|---|---|---|
| N. Eng States.. | 213 | $534,837 | $1,934,924 | $1,662,426 |
| Middle States.... | 678 | 1,634 406 | 5.791,224 | 2,471,806 |
| Western States... | 840 | 2,529,809 | 8.707 194 | 1,923,927 |
| Southern States.. | 241 | 356,232 | 1,018.913 | 784,452 |
| Pacific States.... | 10 | 15,300 | 35.705 | ..... |
| Total..... | 1,982 | 5,070,874 | 17,487 960 | 6,842,611 |
| Scythes..... | 22 | 174.948 | 552,753 | ..... |
| Shovels, spades, hoes and forks. | 53 | 413.540 | 1,635 676 | ..... |
| Cotton-gins..... | 57 | 266,168 | 1,152,315 | ..... |
| Total..... | 132 | 854,656 | 3,340,744 | ..... |
| Aggregate.... | 2,114 | 5,925,330 | 20,828,704 | ..... |

The production of labor-saving machinery, as will be shown by the tables of manufactures, was still going on to the amount of $17,487,960 in 1860, which was likewise an increase of nearly 156 per cent. over the value made in 1850, when it reached the sum of $6,842,611. This was exclusive of all articles made on the farm, which was formerly considerable, but is yearly decreasing as regular manufactories and depots for the sale of farm implements are multiplied, and their cost diminished. It also excludes cotton-gins, scythes, hoes, shovels, spades, forks, and some other articles of hardware, wagons, carts and wheelbarrows, the value of which amounted to $11,796,941, and might appropriately be added to the above table.

Of the total product in 1860, nearly two millions in value was made in New England, being an increase of about sixteen per cent. upon the returns of 1850.

The Middle Ststes increased their production from less than two and a quarter to upward of five and three-quarters millions, or 134.2 per cent. The great States of New York and Pennsylvania returned, the one 333 and the other 260 establishments devoted to this branch of manufacture, and the increase in their product was 172.7 and 85.5 per cent. respectively, over the business of 1850.

In the Western States the increase was most extraordinary, the value having augmented from $1,923,927 to $8,707,194, or 352.5 per cent. Their total production was nearly one-half that of the whole Union. Its increase alone was nearly thirty-nine per cent. of the whole, and nearly equalled the total manufacture of the United States in 1850. The States of Ohio and Illinois together manufactured to a greater amount than any other two States in the Union, the value amounting in the former to $2,820,626, and in the latter to $2,379,362, and the increase to 405.5 and 212.2 per cent., respectively. Iowa increased its manufacture 1,208.6 and Kentucky 755.4 per cent. over the product of 1850.

In the Southern States the aggregate was but little over one million, and the rate of in-

crease nearly thirty per cent. Virginia was the largest manufacturer, but in several there was a falling off from the product of 1850, after excluding cotton-gins, &c., as before mentioned.

The largest amount manufactured in any one county in 1860 was in Stark county, Ohio, in which fifteen establishments produced $900,480, the larger part of which consisted of mowers and reapers, and of threshing machines and separators, in each of which three factories were employed. The next largest county production in this branch was in Cook county, Illinois, which made to the value of $529,000, chiefly in the city of Chicago. Of that sum, $414,000 was the value of 4,131 reapers and mowers made by a single establishment, the largest in the country. Rensselaer and Cayuga counties, in New York, each produced upward of $400,000 worth of agricultural implements, and a single firm in Canton, Stark county, Ohio, made reapers, mowers and threshers to the value of $399,000.

From the New England States there is a considerable exportation of agricultural implements to the British provinces, the Southern States, and other parts of the world.

That the large rates of increase in this branch indicated by the foregoing figures are not due simply to the increase of population, is shown by the fact that in Illinois, whose rate of increase with so large a population is without parallel, the increase in value of agricultural implements manufactured in 1860, as compared with 1850, was 212 per cent., while the increase of population during the same period was only 101 per cent. In Ohio the population increased only 18.14 per cent., while its production of agricultural implements was augmented 417.6 per cent.

## NORTHERN CENTRAL RAILWAY COMPANY, 1865.

The following is the General Superintendent's report of the operations of this railway for the year 1864. The earnings have been:

| | |
|---|---|
| Transportation of Passengers | $752,936 82 |
| " Freight | 1,494,555 25 |
| " U. S. Mail | 26,100 00 |
| " Express | 60,637 41 |
| " for United States | 586,907 36 |
| Rents | 15,104 79 |
| Individuals and Companies | 59,210 81 |
| All other sources | 56,156 71 |
| Total | $3,051,669 15 |

The expenses were:

| | |
|---|---|
| Conducting Transportation | $524,428 42 |
| Motive Power | 552,210 78 |
| Maintenance of Cars | 155,857 00 |
| " Way | 703,401 19 |
| General Expenses | 30,355 13 |
| | 1,966,282 52 |
| Balance, Net Earnings | $1,085,386 63 |

Showing an increase in gross earnings over 1863 of $744,220 85; and of net earnings, $464,805.74.

The expenses for the year were 64 6-10 per cent. a reduction of 8½ per cent.

Passenger Business.—This business has increased $160,260.32; the number of passengers moved northward was 327,420, traveling an average distance of 40 4-10 miles; and southward, 276,221, an average of 39 5-10 miles. Of the above, the local passenger business was 198,490 moving northward, and 156,057 southward—an increase of 77,701; and to and from connecting roads, 247,857—an increase of 53,151. The entire business of the railway and its branches was 742,117 passengers, (exclusive of soldiers,) traveling 31,381,385 miles. The local trade of the road has increased 33 per cent in the last two years.

Freight Business.—An increase of $230,991 35, moving 747,898 tons of all classes of freight, made up as follows: Through freight northward, 1,611 tons; through freight southward, 94,581 tons; local freight and from connecting roads, 651,706 tons; a decrease of 14,837 tons. The reduction is owing to the large movement of Government troops, which, in 1864 was more than double the number moved in 1863, and in consequence depriving the road of a large number of engines in legitimate freight trade; the reduction in tonnage is altogether in coal, a legitimate and important trade to the road, amounting to 47,874 tons; the increase in local and through tonnage, other than coal, being 33,037 tons.

The opening of the Philadelphia and Erie Railroad throughout its entire length, the alliance with the Buffalo, New-York, and Erie Railroad, west of Elmira, and the natural increase on our Railway will throw a largely increased tonnage on the road, in anticipation of which the double track is being pushed to completion. We have power to move a tonnage of 900,000 tons, all in order for service, but we must expect embarressment until the camel engines are rebuilt, mention of which is made under the head of Equipment. Of cars, we have a large equipment in good order, except the Williamsport and Shamokin coal-cars. Many of the box cars are idle during the summer months. It would be a great advantage to erect suitable coal-schutes at Sunbury, for storing and loading coal into those cars, in summer, for movement either north or south, and in winter for back-loading to Elmira.

Mileage and Cost.—The engine mileage during the year was as follows: Passenger engines, 319,287; distributing engines, 62,255; freight-engines, 717,806. Total 1,099,348 miles, at a cost of $127,897.58 for repairs; $163,135.55 for fuel, and $25,766 16 for stores. An average per mile for repairs. 11 7-10 cents; for fuel, 14 8-10 cents, and for stores, 2 3-10 cents. Total, 28 8-10 cents per mile run.

The car equipment on main and leased roads is as follows:

| | |
|---|---|
| Passenger, Baggage and Express Cars | 70 |
| Cars for Freight and Roadway service | 3,506 |
| Total Cars of all kinds | 3,576 |

Roadway.—There have been used in repairs of track and extension of sidings between Baltimore and Marysville, 3,712 tons of rails, 38,788 cross-ties, 7,298 chairs, and 88,194 pounds spikes. Between Marysville and Sunbury, 1,630 tons of rails, 44,331 cross-ties, 7,375 Phœnix chairs, and 59,800 pounds of spikes.

The condition of the track has steadily improved, and will compare favorably with the best roads of the country.

Double Track.—We are now using fifteen miles between Baltimore and Cockeysville, and seven miles between Glenrock and New-Freedom. Three miles more are laid, but not yet in use.

The grading of the distance between Cockeysville and York is nearly completed, and the work of laying the iron can proceed without delay.

The use of the sections of double track now laid has been a great assistance in our train movements, and great relief is anticipated when completed to York.

Between Sunbury and Marysville good progress has been made in the graduation for the second track, and the track-laying can be commenced in early spring and pushed through in the coming year.

Elmira Division.—(Elmira and Williamsport Railroad.)—The earnings of this road have been:

| | |
|---|---|
| Transportation of Passengers | $192,523 53 |
| " Freight | 284,923 61 |
| " U. S. Mails | 11,550 00 |
| " Express | 14,600 00 |
| " for United States | 135,030 65 |
| Other sources | 17,880 49 |
| Total | $656,518 28 |

EXPENSES.

| | |
|---|---|
| Conducting Transportation | $110,121 92 |
| Motive Power | 158,788 60 |
| Maintenance of Cars | 30,776 28 |
| " Way | 297,424 70 |
| General Expenses | 15,675 82 |
| | 612,777 32 |
| Net | $42,740 96 |
| Rental | 165,000 00 |
| Loss in 1864 | $121,259 04 |

The total number of passengers carried was, northward, 63,947, an average of 54.7 miles. Southward, 53,319, an average of 54 miles.

The number of tons of freight moved were: through northward, 82,102 tons; southward, 39,619 tons; local, 48,209 tons. Total, 169,930 tons.

The mileage of engines was 308,770 miles, at a cost of $41,278.23 for repairs, $41,340 04 for fuel, and $7,379.08 for stores, or 29.24 cents per mile run.

The number of engines owned by the road, sixteen.

The car equipment is included in the statement of Main Line.

The condition of this road was such as to compel heavy outlays to make it passable for trains, and in consequence an expenditure of some $120,000, over and above actual earnings since the lease of the road, have been necessary. Much yet remains to be done, and the coming year will require an equal outlay with the present.

In the twenty months passed, 2,660 tons of rails, 51,399 cross-ties, 13,526 chairs, 125,087 pounds spikes, have been renewed, 1,103 feet lineal of bridging have been rebuilt, the water-stations and approaching pipes put in good order, and several miles of gravel-ballasting placked under track, also an entire renewal of coal trestle at Elmira, a new iron turn-table, and the yard-tracks at Elmira increased 80 per cent.

The sidings have been lengthened 15,527 feet, and are still too short for the business of the road.

Shamokin Division—(Shamokin Valley and Pottsville Railroad.)

| | |
|---|---|
| Total Receipts | $226,317 90 |
| " Expenses | $118,827 49 |
| Rental | 74,358 95—193,186 44 |
| Net balance | $33,131 46 |

## AN AMMONIA ENGINE.

In Paris they are now discussing a scheme to propel omnibuses and other vehicles by ammoniacal gas. Mons. Tellier is the inventor of the engine proposed for the work. Under ordinary conditions, ammonia is a gas, but it can be condensed into a liquid; and when in that state, unless it be restrained by pressure, a temperature below thirty two degrees will restore it to the gaseous state. Mons. Tellier puts liquified ammonia in a reservoir, connected by a pipe and stop-cock with a working cylinder. When the cock is opened, the ammonia assumes the gaseous state, and works the piston as a substitute for steam. It is then condensed by water, for which it has strong affinity. The quantity of liquid ammonia per horse-power per hour is said not to exceed three gallons, weighing twenty-two pounds. The water used to absorb it is saved, and the ammonia is recovered from it and used over again.

For use in this way ammonia is said to have advantages over air. In the gaseous state it occupies more than twelve hundred times its bulk as a liquid; yet liquid ammonia, if the vessels which hold it be surrounded by a frigorific mixture, will not exert a pressure of more than a few pounds per inch, whereas air compressed to yield equal power would exert a pressure of 1,700 pounds per inch. In practice air can not be compressed to anything near the extent of ammonia. Moreover, a pump is necessary to compress air; but ammonia may be condensed by an easier method. The water which contains it being heated, it is driven off and condensed by refrigeration. It is, therefore, considered that Mons. Tellier has found in liquid ammonia what inventors have long and vainly sought in compressed air—a convenient method of storing up power so as to transport it in reservoirs from the place where it is generated to the place where it is required for use; and that the ammonia engine has good work to do for the world in many ways besides that of propelling carriages.

In 1831, Mr. Goldsworthy Gurney, in his evidence before a committee of Parliament on steam-carriages, said that he had experimented on ammonia for this use, and believed it might be applied instead of steam; but he did not propose to apply it until the system of mechanical propulsion was established by steam. Mr. W. Mont. Storm of this city also has patented an ammonia engine. As to compressed air as a motor, it is in use, in many cases, where steam is inconvenient. As a motor for carriages, it has not been tried by men of sufficient engineering talent. Mr. Arthur Parsey and the Baron Von Rathen, in London, tried it in experiments, with results that proved its efficiency; but their constructions were not good in a mechanical sense, and it was evident that their claim that it would work more economically than steam was not sustained. But the greatest difficulty of all in these means of applying elemental power is a commercial one. There is not enough novelty in them on which to obtain a patent that will prevent an almost unrestricted competition, as soon as it is proved that machine-carriages can work economically, and their proportions are perfected by men of originality, so that copyists can safely adopt them and build them at common shop prices.

But our opinion of ammonia is that it will not do for tunnel railway or for streets, on account of the expense of preventing leakage and an unpleasant smell from it. In other respects, we are not sufficiently informed to give an opinion of it.—*Artizan.*

## AMERICAN EXPRESS BUSINESS AND ITS ORIGIN.

BY HENRY WELLS, ESQ.

[CONCLUDED FROM LAST WEEK.]

In the principal cities there are numerous lines of "city expresses," which collect and deliver all kinds of goods within a certain limited area, and of "baggage expresses," whose business is to convey travelers' baggage to and from hotels, steamboats, railroads, and private dwellings. As these, however, do not fall properly within the category of express companies, whose history I have endeavored to give you, I need no more than simply mention the fact of their existing.

You may have observed, as I indicated in general terms the routes of the three great inland express companies—the Adams, American, and United States—that though their business is in the main confined within certain geographical limits, they come in some parts of their course into direct competition with each other, particularly for the local business. A glance at the map on which their main lines are delineated will make this point clearer than any amount of words. It may not be amiss to remark that the business is so large and the competition so honorably conducted, that, while the public is better accommodated, the interests of the respective associations are nowise injuriously affected.

Of the amount of business done by the express companies now in operation, it is next to impossible to give any accurate information. No merchant is willing to give the public a specific statement of his income, his profits, or his losses. Neither do express companies desire to invite competition by an exhibit of large gains, or to excite mistrust by a confession of large losses. The only way of giving you an idea of the magnitude of their operations is by stating that the annual expenses of the Adams, American and United States Companies, incurred in the transportation of freight and the salaries of agents and messengers, amount to not less than *ten millions of dollars;* that the single carpet sack of 1839 has now grown into more than thirty cars forwarded daily from the east by the American Express Company alone, while the Adams and United States Companies each require at least an equal amount of transportation; that the American Express conveys freight over 9,000 miles a day in a *direct* line, while its messengers travel daily more than 30,000 miles, and whenever on this extensive route there is a village with a postoffice, this company has an agency at that point. Indeed, the Rocky Mountains to which Harnden banteringlysaid, in '41, I might run an express on my own risk, if I pleased, has long been within the points to which expresses have extended.

When to these scanty items of information I add that, notwithstanding very large losses inflicted upon express companies by public robberies, or by the dishonesty or carelessness of their employes, they have paid, for the most part, remunerative dividends to their stockholders, without exacting unreasonable payments from their customers, I may perhaps have succeeded in giving you some data for estimating the immense amount of business transacted by them.

The present flourishing condition of the principal express companies have not been attended without opposition from rival associations. Some of these were sufficiently formidable to render advisable their incorporation with previously established companies whose business was menaced by their operations, while many others failed to secure patronage sufficient to sustain them. Several railroad companies—I have mentioned one instance in my account of the United States Express Company—have at various times attempted to carry on the express business as a part of their legitimate operations; but they very soon discovered that it was better for them to leave it in the hands of associates specially organized for such business. The successful management of an express company requires the undivided attention of its conductors; a peculiar order of business talent; facilities for securing the direct transmission of freight over railroads belonging to different and often rival or unfriendly companies; perfect control over and strict accountability of the employes; and a special and intricate system of accounts, checks and balances.

The influence of the express upon the general business interests of the country has been very marked and beneficial. Business is always found to prosper in proportion to the facilities afforded for the speedy, safe and economical transmission of money, merchandise and produce; and these the express has supplied to an extent unprecedented in the history of previous transportation companies.

When I commenced the Western Express from Albany to Buffalo, so unremunerative was the through traffic that I made every possible effort to induce producers at each end of and throughout my route to forward fruit, fish, game, and similar articles of luxury; and as they found it greatly to their advantage to do so, from the small beginnings then made, the interchange of such commodities between the east and west gradually increased to the enormous extent which it has now reached, but which it never could have attained without the aid of the express. When in 1842, at the request of that prince of caterers, James Laidley, then of Buffalo, I carried oysters from Albany, receiving for freight three dollars per hundred (*oysters* not pounds), their arrival in Buffalo was advertised in the newspaper, and created almost as much excitement as the locomotive on its first trip through the country. Till they were thus conveyed, the Buffalonians were often deprived for months of that bivalular luxury; now several car loads of oysters leave New York, Albany, Philadelphia and Baltimore for the west daily, throughout the season. Through the facilities of transmission offered by the express, the game of the western forests and prairies is now as abundant in New York, Albany, Philadelphia and Baltimore, as barnyard poultry; while the luxuries of the ocean and of foreign lands are as common in Chicago, Cincinnati and St. Louis, as in those of the eastern cities Indeed, it may be truthfully said that with the aid of the telegraph and express, a gentleman in almost any part of the Eastern, Western, or Middle States, wishing to give a *recherche* dinner party, has the markets of the country, from the Atlantic coast to the Rocky Mountains, at his disposal.

Expresses have always kept pace with—sometimes they have run in advance of—railroads, and by the traffic they have secured, have augmented in no small degree the revenues of those corporations which have so materially contributed to the rapid development of the wide resources of the wide West.

Previous to the establishment of the express, the United States Bank transacted all exchange business between distant points. When the corporation was dissolved, the need of some medium through which remittances and exchanges might be safely made was

widely felt. The express met this want, and transacted all such business at less cost than the United States Bank had done. When remittances could be made only by drafts or in specie, sent by special messenger, (whose safe transit or fidelity could not in all instances be implicitly depended on), the rate of exchange or cost of tranmission, which varied from one to ten per cent., was a heavy tax on such transactions. But the ease, safety, and cheapness with which specie, drafts, notes and other valuable documents may now be forwarded through the express has greatly facilitated such remittances and equalized the rate of exchange, which rarely exceeds one and a half per cent. The immense amount of money used by the Government in all its varied operations throughout the country, is now conveyed by the express, which also conducts the entire exchange business of the country.

Moreover, express companies undertake to collect bills for merchandise forwarded through them, and to receive from merchants, importers, jobbers and others, goods which are to be paid for on delivery—the express assuming the responsibility. They thus enable parties unknown even to each other, save by name, to transact mutually advantageous business without risk, and at very small cost. Such transactions, now amounting annually to millions of dollars, could not, through want of mutual acquaintance and confidence on the part of the parties engaged in it, be carried on but for the express. The benefit thus conferred on the trade of the country is obviously incalculable.

Did the limits of this paper permit, and were this the place for the recital, I could narrate many incidents of peril, exposure, and almost miraculous escapes, equalling anything to be found in the pages of romance. I remember, however, that I stand before gentlemen who, in their aggregate capacity, at least, deal with the "hard facts" of statistical and geographical science, not with the reveries or fictions of the poet and the novelist. These may stigmatise facts as "the brute beasts of the intellectual field;" but they are in *fact* the ready-to-be-articulated frame work on which the useful and graceful forms of civilization may be developed; or rather, they are the hewn and polished stones with which the temple of science is constructed. But there are "facts" in the history of the Express which add fresh corroboration to the truth of the adage; "Truth is stranger than fiction." I could tell of midnight adventures in the forest; of perils in the waters; of perils by robbers; of awful catastrophes, such as the burning of the "Lexington," the "Central America," and the "Golden Gate," and the swamping of the "Atlantic;" of wrecks upon the fickle and stormy Erie; of robberies ingeniously planned and even more ingeniously discovered; of humorous, pathetic, and tragical occurrences; all of which have fallen within the experience of express messengers—but I forbear. Are they not already written in the records of the express companies and in the chronicles? We, some of us at least, have read in the days when poetry and fiction had their attractions for us, Romances of the Forest, the Rail, the Road, the Ocean, and even the Raging Canawl; shall not our grand and great-grandchildren read in coming years the Romance of the Express?

☞The Chicago and Milwaukee Railway earned for the first four months of the current year, $248,357 48, against $147,809 83 for the same time last year—an increase of $75,466 75.

## RE-ESTABLISHING THE NETWORK OF SOUTHERN RAILROADS.

One of the first results of our recent glorious successes will be the re-opening of several rebel railroad lines, and the general improvement of the network of roads traversing the South.

For military and other reasons, it is of the highest importance that the great thoroughfare connecting Richmond with Knoxville, Chattanooga, and other points in Tennessee, be re opened as soon as possible.

The Northern and Southern military authorities have always regarded this as one of the main arteries of the Confederacy, and it was for this reason that the latter so long and stoutly resisted its severance. When at last this result was accomplished by the capture of Knoxville, the enemy were compelled to keep up communication with Georgia, Alabama and Mississippi by a long and tortuous route through North and South Carolina. Though controlling the western terminus of the road, we have never been able to use the route except for a few miles east of Knoxville, but have been compelled to maintain communication between east and west, by the circuitous route through Nashville and Louisville. This once re-opened, however, we can transport troops and munitions of war back and forth in a very short time. The through route consists of "the Petersburg and Lynchburg," one hundred and twenty three miles long; the "Virginia and Tennessee" extending from Lynchburg to Bristol, two hundred and four miles, the "East Tennessee and Virginia," running from Bristol to Knoxville, one hundred and thirty miles, and the "East Tennessee and Georgia," extending from Knoxville to Chattanooga, one hundred and ten miles—total distance from Petersburg or Richmond to Chattanooga five hundred and sixty seven miles. At last accounts our forces were engaged in rebuilding the Tennessee section as far east of Knoxville as Morristown, forty-two miles. Beyond that point there is a gap (made by our troops) nearly to Bristol, but with this exception this great thoroughfare is in running order all the way from Petersburg to Chattanooga, and in the event of the early fall of Lynchburg, now made certain, we may expect its immediate re-opening.

The James river, coursing from west to east through more than one-half of the State, is the natural line of defence for the northern part of Virginia. As the surrender of Lee necessitates its abandonment, it will now be an easy task to keep the people quiet. They fully realize that all Northern Virginia now lies at our mercy, that further resistance is hopeless, and they may encourage rather than obstruct the re-opening of the thoroughfares of travel. These consist of the Orange and Alexandria Road, running from Alexandria through Warrenton Junction, Culpepper, Gordonsville and Charlottsville to Lynchburg, one hundred and seventy miles; the Virginia Central, running from Richmond through Hanover Junction, Gordonsville, Charlottsville and Staunton to Covington, two hundred and five miles; the Richmond and Potomac running from Richmond through Hanover Junction and Fredericksburg to Aquia creek, seventy-five miles, and thence connecting with Washington by the Potomac river; the Manassas Gap, running from Alexandria through Front Royal to Mount Jackson, in the Shenandoah Valley, one hundred and twelve miles; the Alexandria and Louden, running from Alexandria to Leesburg, thirty-eight miles; the Winchester and Harper's Ferry, thirty-two miles long, and the Richmond and York river, extending from the rebel capital twenty-four miles.

For military purposes it will only be necessary to re-establish rail communication between Alexandria and Richmond. Our Washington correspondent informs us that one thousand laborers have left Washington for this purpose, though he does not state whether the route decided upon for re-opening is that through Culpepper and Gordonsville, or the road extending from Aquia Creek to Richmond. From the fact that the region around Gordonsville is not controlled by us, the Aquia Creek road appears the most feasible one of the two for re-opening This was the favorite route of travel prior to the war.

The surging to and fro of the Union armies in Virginia has resulted in the partial destruction of all the above-mentioned roads. After Grant crossed the Rapidan a year ago, the rails were removed by us on the Orange and Alexandria Road, between Fairfax and the river, since which time they have not been relaid. All the track of the Aquia Creek Road, as far south as Fredericksburg, was taken up by the rebels after Hooker's abandonment of the region, prior to the battle of Gettysburg. After Grant passed down through the State, the enemy rebuilt the track from Fredericksburg to Richmond, keeping it in running order until Sheridan's late raid.

It may be that the Virginians are not yet sufficiently subdued in their rebellious proclivities to quietly acquiesce in the rebuilding of the proposed route from Washington to their capital. Should such be the case, a summary execution of a few guerillas would doubtless put an effectual check upon raids The people can not claim the immunities belonging to prisoners of war, but must expect summary punishment in the event of being taken on raiding excursions. A warning in advance will probably restrain their destructive proclivities in case of their still entertaining them.

Below the James river the only route which will probably be re-opened at once is that extending from Petersburg, south through Weldon to Wilmington, two hundred and twenty-six miles long. This road is already run by the Union forces from Wilmington to Goldboro, seventy-four miles north.

Should General Grant, having demolished Lee, turn upon Johnston, he will doubtless follow down the Danville Road from Burksville Junction, rebuilding it as he advances.

The Union "Construction Corps" have exhibited a wonderful facility in rebuilding abandoned and destroyed railroads since the war commenced, and can very soon complete whatever work may be mapped out for them in the future.—*N. Y. Commercial Advertiser, April* 10.

---

Operating Expenses of Railroads.—From the report of the New York and Erie Railroad, we learn that the operating and repairs foe 1864, were 67 7-10 per cent. of the gross receipts. On the Pennsylvania Central, the operating expenses for the same year were 55 7-10 per cent. On the Philadelphia and Erie road, which is operated by the Pennsylvania Central, for 70 per cent. of the gross earnings, the expenses amounted to $43,154 80—more than the 70 per cent. received. On the Pittsburgh, Fort Wayne and Chicago, road the operating expenses were 57½ per cent. of the gross earnings. Eight years ago, (1857) the average of the operating expenses of fifteen of the principal roads in Massachusetts was 61 per cent. of the gross earnings.

## JOURNAL OF RAILROAD LAW.

**Liability of railroad company for baggage of passenger lost in passing over connecting roads for which ticket was sold.**

The recent case of Schwarzenberger against the Pennsylvania Railroad Company, was an action for the recovery of damages for the loss of the plaintiff's carpet bag, containing, as was averred, the wearing apparel of said plaintiff, $728 in good coin, and a watch, chain, seal and key, valued at $130.

The plaintiff took passage at Philadelphia, for Cincinnati, on the 10th of February, 1861, having purchased at the ticket office of the defendants a through ticket, and received from the proper officer of the company a brass check for his carpet bag, having upon it the following letters and figures:

P. C. & C. R. R.,
Phila., 458,
Cincinnati.

The plaintiff left in the train the same evening, and was carried through to Cincinnati; but the carpet bag and contents were never delivered to him.

The complaint charged the defendants with carelessness and negligence as common carriers, which the defendents denied.

On the trial, the purchase of the ticket, the delivery of the baggage check, the loss of the carpet bag and its contents, were proven by the plaintiff, who thereupon closed his case.

The defendants then proved by their ticket agent at Philadelphia, that the tickets sold by the defendants to persons desirous of traveling beyond its lines of road, over other connecting or adjacent railroads, were in the following form:

"PHILADELPHIA TO PITTSBURG. PITTSBURG TO CINCINNATI. In selling this ticket for passage over roads west of Pittsburg, the Pennsylvania Railroad Company acts only as agents for the western lines, and assumes no responsibility west of Pittsburg."

The defendants also proved by one Garret, that he was, in February, 1861, and still is the general baggage agent of the defendants, the witness producing a paper, testified that it was the through baggage way bill from Philadelphia to points west of Pittsburg, for the 10:45 P. M. train, of February 10th, 1861, out of Philadelphia for Pittsburg; that he knew the signature of one C. S Jenkins, who was the baggage agent of P., F. W. & C. R. R; that that was his signature, and check "458," for "Cincinnati *via* Steubenville," was marked in the list of baggage on the way bill. The way bill was then admitted in evidence, the receipt at the foot of same being in the following words:

"Pittsburg, February 11th, 1861, received of the Pennsylvania Railroad Company the above described baggage, in good order, which we agree to deliver in like good order to the several destinations above stated; Signed C. S. Jenkins, Agent P., F. W. & C. R. R.

The defendants then closed their case, and the judge instructed the jury to find for the plaintiff, subject to an opinion afterwards to be formed by the Court, upon the points of law presented by the evidence in the case; and thus reserving the questions of law for the future consideration of the Court, the cause was submitted to the jury, who thereupon rendered their verdict, finding "for the plaintiff, subject to the opinion of the Court."

Afterwards the judge directed judgment to be entered for the plaintiff, upon the verdict. The defendants' counsel excepted to the charge and opinion of the Court, and the case was thereupon certified to be a proper one for the opinion of the Supreme Court of Pennsylvania, sitting in banc, which was afterwards delivered by

STRONG, J.—The facts in this case are, in very essential particulars, unlike those which appeared in The Camden and Amboy Railroad Company *vs.* Baldauf 4 Harris, 67, and they call for the application of different principles.

We have here no question relative to notice by common carriers, or its effect in limiting their common law liability. Nor need we inquire whether the defendants had power to contract for the carriage of the plaintiff and his baggage beyond the terminus of their railroad.

Conceding that they had, the evidence is very satisfactory that they did not.

The plaintiff took passage at Philadelphia for Pittsburg, and thence for Cincinnati. The carpet bag, for the loss of which, with its contents, this suit was brought was offered by him as his baggage, and was received as such. There is no pretence that it was offered or taken as freight. Nothing was offered or paid for its carriage apart from what was paid for the plaintiff's own carriage as a passenger. It was offered in the usual form of personal luggage, and there was nothing to indicate a desire of the plaintiff, or intention of the defendants, that their obligation to transport safely the carpet bag should be distinct from or greater than their obligation to transport safely the person of the plaintiff In fact, the luggage was understood and treated as inseparable from the passenger. What was then the contract between the parties? The defendants are not common carriers except between Philadelphia and Pittsburg. They were under no obligation to carry the plaintiff beyond the termination of their route, or to transport his luggage. It is true, they received the fare for the whole distance from Philadelphia to Cincinnati, and if that were all, it might raise a presumption of an agreement to carry over the entire route between the two cities. But contemporaneously with the receipt of the fare, and as evidence of the contract into which they entered, they gave to the plaintiff a ticket, informing him that they assumed no responsibility for his carriage, and of course for the carriage of his luggage beyond Pittsburg. They notified him that they acted only as agents for the carriers, whose route extended westward from Pittsburg, and not at all for themselves. With this express disclaimer of personal liability, there is no possibility of implying any agreement. It is not to be doubted that the defendants could act as agents for a connecting railroad line, and if they could, the contract for carriage between Pittsburg and Cincinnati was with the principals of the defendants and not with themselves. Their own engagement was performed when they had transported the plaintiff to Pittsburg, and delivered his baggage to the carriers on the connecting railroad beyond leading to Cincinnati.

It is settled in this state that a carrier may limit his responsibility even upon his own route, by a general notice that the baggage of a passenger is at the risk of the owner, provided the terms of the notice are clear and explicit, and provided the notice is brought home to the employer. Beckman *vs* Shouse, 5 Rawle, 189; Bingham *vs* Rodgers, 6 W. and S., 500, and Saing *vs* Colder, 8 Barr, 484. He may not, however, release himself from responsibility for want of ordinary care.

Here, however, was no attempt by the defendants to limit their responsibility as common carriers. There was nothing more than an express refusal to assume an additional and unusual liability, a careful guarding against the implication of a contract, which, without the notice, might have arisen from the fact that the passage money for the entire distance to Cincinnati was here received. Towles *vs* The Great Western Railroad Company, 7 Exch., 699.

This is the whole case. The plaintiff breaks down in the beginning. He fails to prove that these defendants contracted to carry him and his baggage beyond Pittsburg. His remedy, therefore, is not against them, but against the company which undertook for that portion of the route upon which the carpet bag was lost.

Judgment reversed, and judgment given for the defendants.

## RETURNS OF DIVIDENDS.

Commissioner Lewis, of the Internal Revenue Bureau at Washington, has written the following letter relative to the returns of dividends in the pending assessment of the income tax:

TREASURY DEPARTMENT,
OFFICE OF INTERNEL REVENUE,
WASHINGTON, April 11, 1865.

SIR:—I deem it proper, in view of the pending assessment of the income tax, to call your especial attention to those changes in the 116th and 117th sections of the Revenue Law, which relate to the tax upon income derived from bank dividends, interest upon railroad bonds, etc.

Under former laws you will remember that income derived from these sources, upon which a tax had been paid directly to this office, was deducted from the gross income of the tax-payer, while by the act of March 3, 1865, it is provided that, in ascertaining the income of any person liable to an income tax, the amount received from institutions whose officers, as required by law, withhold a per centum of the dividends made by such institutions, and pay the same to the Commissioner of Internal Revenue, or other officer authorized to receive the same, shall be included; and the amount so withheld shall be deducted from the tax which otherwise would be assessed upon such person.

Although sections 120 and 122 clearly contemplate that the Government shall receive five per cent of the whole amount paid out by any of the companies enumerated on account of dividends or interest upon bonds, it has been contended by some companies that as they were merely authorized and not required to withhold the tax from such dividends or interest, it was competent for them to pay the tax and charge the same to their expense account, and make the payment to the stockholder or bondholder free of tax. The result of this construction is to give the Government $5 for every $100 paid to the stockholder or bondholder, instead of $5 for every $95 thus paid.

This view has been insisted upon by some companies, and they have consequently refused to withhold the tax from their dividends, and have paid to this office but 5.105 of the amount actually appropriated to their dividends, instead of 5.100, as is plainly intended by the law.

Where any company has thus refused to withhold the tax from its dividends, it is clear that the provision quoted above from section 116 has no application, and you will therefore be particular to inquire as to this point, whenever any tax-payer claims a deduction from his income tax upon this account. If it appears that the tax has not been withheld the deduction should not be allowed.

It should be borne in mind, however, that it has been the practice with some companies to declare their dividends nominally free of tax, while in reality the tax has been withheld and fully paid to this office; that is to say, if the stockholder has received $95 and the Government $5, or if the stockholder has received $100 and the Government $5.26, the tax has been practically withheld, whatever name may have been given to the transaction. If, on the other hand, the stockholder has received $100 and the Government but $5, the tax has not been withheld, and no deduction should be allowed. The same principles will apply to the case of dividends paid prior to the passage of the act of June 30, 1864.

If you are unable to ascertain the manner in which payment has been made by any institution to any of its stockholders resident in your district, you can obtain full information by communication with this office.

Very respectfully,
JOSEPH J. LEWIS, Commissioner.

## LIABILITY OF RAILWAY CO.'S,

FOR GOODS STOLEN FROM DEPOTT.

The Supreme Court of Massachusetts has recently decided a case of some interest both to the business public and the railway companies. The plaintiff sued the Western Railway Company for goods deposited in their depot at Charlton, and proved the delivery of the goods at Boston and the payment of the freight to Charlton, where it was alleged by the depot master they were stolen from the depot. At the trial in the Superior Court of Worcester, the Judge ruled that the evidence was insufficient to enable the plaintiff to maintain his action, and the jury accordingly returned a verdict for the defendants.

The plaintiff alleged exceptions thereto, which were afterwards fully argued and heard before the Supreme Judicial Court, when the the following opinion was rendered by

BIGELOW, C J.—There was not a *scintilla* of evidence offered by the plaintiff, to sustain the allegations in the declaration, that the defendants were guilty of negligence in their capacity as warehousemen. In the first place, there was no legal evidence of the loss of the plaintiff's property. So far as is shown by the exceptions, the only evidence on this point was that the plaintiff's messenger said that the defendants' agent told him that the depot had been broken open and the goods stolen. This was purely hearsay.

But assuming that this part of the plaintiff's case was satisfactorily made out, there was still an essential deficiency in the proof necessary to sustain the action No fact was shown which tended to prove any neglect or omission of duty by the defendants. It was not sufficient to prove that the depot was broken open and the goods of the plaintiff stolen. This might have occurred when the defendants were in the exercise of the most careful vigilance and oversight.

It was necessary for the plaintiff to go further, and offer some affirmative and substantial evidence of carelessness on the part of the defendants. They were liable only as depositaries, and could not be held liable except for negligence in the want of ordinary care in the custody of the goods. Thomas *vs* Boston and Providence Railroad, 10 Met. 472. Of such negligence there was no evidence.

It was not shown that the depot was not securely locked, or that any precaution against the risk of robbery was omitted, which a person in the exercise of due and reasonable care would have taken. In this state of the proof the court was well warranted in ruling, that the evidence was not sufficient to maintain the action, and in withholding the case from the jury. Denny *vs* Williams, 4 Allen, 5.

The exceptions were overruled, and the verdict for the defendants sustained.

## THE WISCONSIN PEAT BEDS.

We have received from a friend at Madison, Wis., a specimen of peat taken from an extensive bed, on the farm of Col. Wm. B. Slaughter, about seven miles west of that city, on the line of the Prairie du Chien railroad. The specimen is in the condition in which it was taken from the bed, except that it has been dried and pressed in a convenient form for fuel, to the solidity of coal. The farm of Col Slaughter contains, it is supposed, about 250,000 cords of this psat, and it is his intention to organize a company and set about manufacturing it for a western market. It has been demonstrated by chemical analysis that this peat is fully equal to coal as an article of fuel, and superior to any other coal but the cannel for the manufacture of gas, while it can be produced at a much less cost. This peat, in color, resembles the outside of pressed tobacco that has been exposed to light and air, and is quite as hard and heavy. The internal structure is so compact that on cutting it with a knife a smooth polished surface is formed. The specimens that we have burn with a flame clear and brilliant as seasoned maple or hickory, and produce no unpleasant odor like coal. Specimens of the peat have been exhibited to Dr. A. A. Hayes, of Boston, the famous analytical chemist; Dr. E. Carr, Professor of Chemistry in the Wisconsin State University, and other distinguished practical men, and they speak highly of its merits. Professor Hayes says "its flaming quality is of a marked character," and that "the inflammable part has a high heating power, and burns freely and clearly from the ash." * * "Take the 59 parts of the inflammable compounds, as representing the positive combustible matter of this peat, we have an equivalent closely corresponding to that of oak wood; and I am led by my results to expect an equal heating power from an equal weight of tish peat, burned in comparison with wood." In regard to its gas making powers, Professor Hayes says: "It exceeds all common cannels, and of course is far above any bituminous coal, and can be worked with *poor* coal to make *good* gas. * * There are only two or three cannel coals known which afford so much illuminating material, placing this peat in the first class of gas materials."

From investigations already made, Col. Slaughter and his friends in Madison are led to believe that this peat bed will speedily become a source of immense profit to the fortunate proprietor, and highly advantageous to the manufacturing and gas interests of the Northwest.—*Chicago Tribune.*

PEAT FOR LOCOMOTIVES.—The Syracuse (N. Y.) *Courier* says an experiment has been made with peat in a locomotive on the Central Railroad. The engine drew a car, containing the superintendent and a number of gentlemen, twenty miles in forty-five minutes, without an attempt at making speed. The peat made a beautiful fire, throwing out immense heat, and burning with a steady flame. The steam was kept up at an even gauge of from ninety to one hundred pounds during the trial trip. Only half a ton of fuel was used in the trip.

## NATIONAL DEBT (OFFICIAL),

| | Oct. 31, 1864. | March 31, 1861. |
|---|---|---|
| Gold bearing | $961 170,791 80 | $1,100,361,241 80 |
| Currency interest | 584,039,315 61 | 751,055,128 29 |
| Interest ceased | 356,720 99 | 349,420 09 |
| Without interest | 471,532,688 25 | 615,189,287 16 |
| Total | $1,017,099,575 75 | $2,366,955,077 34 |
| Increase | | $349,855,561 59 |

or $2,323,000 per day for 131 days.

The leading items show the following changes:

| | Oct. 31. | March 31. | | |
|---|---|---|---|---|
| Certificates of Indebtedness | $236,373,000 | $171,790,000 | Dec.. | $64,538,000 |
| 7-30 Notes | 76,668,550 | 300,812,800 | Inc.. | 224,144,250 |
| Couponed do. | 102,329,680 | 156,477,650 | Inc.. | 54,147,970 |
| Unpaid Requisitions | 37,515,000 | 114,256,548 | Inc.. | 76,740,648 |
| Debt bearing interest in coin | | | Inc.. | 139,190,450 |
| Debt bearing interest in lawful money | | | Inc.. | 167,015,813 |
| Debt bearing no interest | | | Inc.. | 43,656,599 |
| Six per cent. bonds exchanged for Seven-Thirties | | | Inc.. | 13 344,750 |
| Five-Twenties of June 30, 1864 | | | Inc.. | 48,097,400 |
| Ten Forties | | | Inc.. | 91,090,100 |
| Texes Indemnity Bonds | | | Dec.. | 545 000 |
| Five per cent. Temporary Loan | | | Inc.. | 4,097,137 |
| One-and two year five per cent. Notes | | | Dec.. | 50,996,760 |
| Fractional Currency | | | Inc.. | 3,528,223 |
| Amount in Treasury | | | Inc. | 30,613,272 |

The department has used 6 per cent. interest notes very freely since October 31, but the statement is more favorable than the public has believed. Instead of three millions per day increase in the debt, it is only $2,323,000, and will be less under the next statement covering five months expenses.

THE ANTIQUITY OF PETROLEUM.—In Egypt petroleum was used for medicinal purposes nearly four thousand years ago, and oil springs are still in existence in that country. In the latter part of the last century two ships' cargoes of the crude oil were transported to England to be sold, but the process of refining not being understood, the traffic was abandoned. Under the name of Sicilian oil, the people of Agrigentum used what is now known as petroleum for purposes of illumination, and in Parma there is a spring of napetha which the people apply to a like use at the present day. In Asia Minor the oil has been known to exist, and has been used to a limited extent for ages. The oil wells in Burmah, it is estimated, have been yielding their present supply of eight hundred thousand barrels per annum at least a hundred years, amounting during that period to about eight millions of barrels in English measure. Oil wells also exist in Persia, and it is said have lately been discovered near the Sea of Azof, while on the Island of Samos they existed five hundred years before the Christian era.—*Lon. Grocer*

MESSRS. LOVELAND and Smith have this fall and winter opened a coal-bank near Golden City, between the table mountains and the main range. They are forty feet down, with a vein of coal eight feet wide. This coal is vertical, but shows evidence of assuming a horizontal position as the vein goes down. The coal looks very much like the canal coal, and burns with a bright, pure flame, leaving but little cinder and white ashes. This coal will coke with little chemical aid, and one ton is equal to two cords of wood for heat. This coal is full of iron and tar, and I have reason to believe that by digging, coal-oil will be found in abundance. This settles the question of fuel for the mines, as these veins of coal are known to extend eight miles along the base of the main range of mountains; and we have the assurance given by nature herself that the mines of Colorado are to be supplied with fuel.—*Colorado Miners' Register.*

## THE RAILWAY GAUGE.

The experience of the past four years has shown, if it were not fully understood before, the great misfortune of having so many different gauges in our railway system. The government necessities, for transportation to meet military emergencies, found a great stumbling-block in this difference of gauge. In the requisitions upon the different companies for locomotives and cars, the existence of the evil was demonstrated fully, and for a long while the government suffered from this cause just as the business public has done We have in this country, where the railway gauge should be identical, every variety of width from three and one half feet to six feet The prevailing width is 4 ft 8½ in., but in the legislature return of one State we find the gauges to be 4 ft., 4 ft. 3 in., 4 ft. 6 in, 4 ft 8½ in., 4 ft 10 in., 5 ft. and 6 ft. Now this preposterous jumble of gauges ought not to exist, and should be abated by State legislation. It is a hindrance to the business public, causing losses and detentions which in the aggregate amount to no mean trifle. We are fully aware that even State legislation can not entirely meet this evil without a great stretch of power. In New York State, for instance, there are two distinct systems of gauge, the 4 ft. 8½ in., and the 6 ft. or "Erie" gauge It would be a manifest hardship for the legislature to compel either of these systems to adopt the other—because, perhaps, the connecting lines in adjoining States might not be permitted to make the change, and thus there would be another evil added—though we have no doubt that it would in the course of years be found true economy to reduce the 6 feet gauge to a lower figure. The large amount of dead or non-paying weight which the broad gauge lines are compelled to pay for the haul, is a serious tax upon their treasuries, and we can not doubt that the more thoughtful owners of these lines are of this opinion. On the other hand, the 4 ft. 8½ in. lines suffer from the contracted space into which they are compelled to crowd the machinery of the improved locomotives; but they save in having less dead weight compared with their paying load, and they save in the first cost of engines and cars, while these are fully adequate in power and in space to haul and carry the traffic. In economy of working, the narrow gauge has others The outside of the forging, which may be a shaft two feet in diameter, is rapidly heated and expanded; and, as we see when it is broken, the expansion of the outside splits the inner part, and makes fissures which reach half across it, and probably the cohesion is impaired throughout the middle portion. And when the hammering is done, the cooling is too rapid, in consequence of which the outside is strained, and weakened; at least it is the common opinion that large forgings are not nearly so strong as the scraps or bars from which they are made.

If these ideas are correct, what is the remedy? Obviously this:—slow heating, slow cooling, and quick working.

Let us therefore suppose that, instead of forging a shaft in the usual way, we make rings of moderate thickness, and turn them truly inside and outside, and truly face the surfaces that are to be united. We then put these rings on a wooden core, with a strong tubular rod in the center of it, with a screw in its end, as in Armstrong's process. We next suspend the shaft in a furnace, and apply heat slowly until the whole has a welding heat. The pressure being constantly maintained by the screw, aided by springs, and the welding-heat kept up for some hours, we know from trials that the welding will be sound.

Now, according to this theory, this shaft may become weak or strong, according to the subsequent treatment. If it is cooled too suddenly, it will suffer internal strains, and perhaps disintegrations, and its initial tensions will be unequal and antagonistic; but if it be cooled slowly and equally it will have no such strains, and will be a stronger shaft.

The injury by oxydation, while in the fire, is a barbarism that should no longer be tolerated; heat may be so applied as not to impair the polish of steel or iron, if there be a proper furnace and apparatus. This we expect to see put into operation by a company now organizing for metallurgical operations on a large scale.

Slow heating, slow cooling, and avoidance of hammering in the open air, and pressing instead of hammering, seem to be the means of giving to large forgings the strength due to small ones for equal sections. And these views are confirmed by many facts, and are in fact coming into practice; but are retarded by deficiency of capital and enterprise, in manufacturers and their customers.—*Atizan.*

## HARDENING STEEL.

One of the difficulties in hardening steel is the spheroidal state of water when in the presence of hot metal. It will not touch the metal, and therefore can not take heat from it rapidly. In hardening dies at the U. S. Mint this difficulty is overcome, wholly or partially, by a jet of water of great force under a head of fifty feet, the effect of which is to force the water into contact with the metal against the repellant force of heat, which causes the spheroidal state. Thus mechanical force overcomes the indisposition of water to touch hot metal.

Starting from this point, what can be done? How can we best apply force to compel a perfect and constant contact of metal and water, and thereby insure the most rapid cooling, which, it is usually considered, will produce the greatest hardness? If we press the metal against ice, it seems as if it would accomplish the object Or for work of importance, we may use frozen mercury or frozen carbonic acid, or rosin, wax, tallow, or other material, the general effect being that, as soon as the material is melted, it is pressed out, and the metal is kept in contact with the solid, which must be at the temperature of its melting point, 32°—or 40° according to the substance used.

Cracking the steel may result from extreme suddenness of cooling. But if, as is supposed the suddenness is the cause of hardness, the heat need not be so great. If instead of cooling from a bright red to the ordinary temperature of water, in the time usually taken in water, we could in half the time cool from a dull red to the melting point of rosin or tallow, perhaps equal hardness would be attained, and without increased danger of cracking. Or if from a still lower heat, even that of melted zinc, we could suddenly cool down to the temperature of ice, or frozen mercury, certain different qualities would probably be attained. And we might go to the other extreme, and heat to a white heat, and cool to the temperature of boiling oil; and other qualities would result. And these different qualities might be suitable for different uses.

We recently announced that the trustees of Columbia College have instituted a school of mining. Perhaps in time they may add metallurgy. Then we may hope that the theorists and experts of the school will try the experiments above suggested, and many more that their own observations and reflections will suggest to them. When we see professors in overalls during the day, working at the forges and furnaces, and furnace-men in the evenings in the lecture rooms, we may hope for improvements in this line.—*Artizan.*

## FORGING.

Some time ago we had occasion to ask the opinion of the Novelty Works on a sample of iron. It was tested; and during the examination, a conversation occurred relative to the breaking of large steamship shafts. In one instance the middle part of the iron at the fracture was found to have little strength, while the outer part was of excellent quality. It was thought by some that there had been fraud in the manufacture, and to test the question some of the weak iron was cut out, and forged into a bar, and tested; and was found equal to the outer portions of the shaft. The weakness of it in the shaft was explained by the theory that hammering on the outside consolidated and improved the iron, while the inner portion, for want of working, remained imperfect.

On this theory it is claimed that a steam-hammer of great weight makes a forging solid and sound throughout. But still it is found that shafts forged by steam-hammers of liberal weight are not always solid in the center; and, to remedy this imperfection, the English are constructing hydraulic presses, of immense power, to squeeze the metal, instead of hammering it. They expect to compress it equally throughout, instead of compressing it superficially.

In thick castings we find the same phenomenon of weak and spongy iron at the center, while the surface is sound. And castings of moderate weight are in this respect faulty; and it is necessary to anneal them to make them strong enough for their service. The unequal cooling is deemed the cause of weak castings; and provisions for equal cooling are the means proposed to remedy the evil.

Now, if unequal cooling, or rapid cooling, will weaken cast-iron, is it not likely to effect wrought-iron nearly in the same degree? We suspect it is; and we attribute the weakness of large forgings to ill treatment with heat, more than to improper hammering.

At a steam forge we see a fire strongly blown by a blowing machine that surpasses all great advantage over its wider rival without doubt. We have before now adverted its detail to the elements of this increased cost of operation to the broad gauge lines, and therefore shall not now more fully refer to this part of the general subject, having another specific object in view.

The accidental adoption of the 4 ft. 8½ in. gauge in England led to its use in this country, we having imported our engines with this gauge from England. If we could have looked forward to the present improvements of the locomotive, which a few inches of extra width in the gauge would so fully accommodate, a gauge of five feet would have been adopted with great advantage. This would have sufficed for the details of the locomotive and would have given a little more room in passenger and freight cars, while the extra expense of construction of road and machinery would have been very slight and the additional dead weight hardly appreciable. If the five feet gauge had been at first adopted, it would doubtless in some degree have prevented the use of the exceptional broad gauge, as the too confined space in the nar-

row gauge for the details of the locomotive was one of the arguments used in favor of a wider gauge. One of the greatest evils that the government and the business public have suffered from, and are likely still to suffer from, is this mixture of railway gauges. A "break of gauge," in a country like this, where we all claim to possess a modicum of common sense, ought not to be permitted. Legislative action, the newspaper press, business men and general public opinion ought to be combined against it. We ought to adopt the five feet gauge throughout the entire country for every railway that carries passengers and freight. As there is no central or governmental power to compel this uniformity of gauge throughout all the States of the Union, enlightened public opinion should compel it. It is a measure fraught with great advantage to the government in times of emergency and will always be of advantage to the business and travelling public.—*Railway Times.*

## MONETARY AND COMMERCIAL.

It is useless to make any extended comments on the monatary and commercial state of the country. The great calamity, which is before the country, has occupied all minds and nearly paralyzed business during the last week. The Government has part of its obligations to contractors and their money is a little plentier, but with no such positive addance, that we can say money is plenty. Commercial business is, however, proceeding with great regularity and to most persons with ease. In gold there is very little change.

The official Tabular Statement of the Public Debt of the United States, all descriptions, including the present unpaid requisitions on the Treasury, has been published by Secretary McCullough. The figures compare as follows with the statement of Secretary Fessenden of October 31st, 1864:

PUBLIC DEBT OF THE UNITED STATES, MARCH 31.

| | MARCH 3. | OCT. 31. |
|---|---|---|
| Six per cent. 1867 '78..... | $18,322,592 | $18,323 592 |
| Five per cent. 1871–'74 .... | 27,022,000 | 27,022 000 |
| Five per cent. 1865..... | 1,907,000 | 2,052.000 |
| Six per cent. 1881 ..... | 282,561,400 | 268,392,800 |
| 7.30s, convertible into 1881 | 615,250 | 14,145,000 |
| 5 20 ve rs six per cent..... | 596 545,9 0 | 548,538,500 |
| 10.40 years five per cent.... | 172,770,100 | 81,680 000 |
| Oregon six per cents..... | 1,016,000 | 1.016.000 |
| Total Gold-Bearing.... | $1,100 361.542 | $961.170,792 |
| Deposits, six per cent.... | $52,452,328 | $48,142 975 |
| Treasury Certificates, 6s.... | 171,790 000 | 236,373,000 |
| Interest Notes, 5s..... | 69,522,450 | 120,519,110 |
| Compound Notes, 6s..... | 156,477,640 | 102 3:9,680 |
| New 7.30s..... | 304,212,800 | 76,668,550 |
| Total Currency Interest | $751,055,128 | $584 039 315 |
| Greenbacks ..... | $433 166,569 | $432.160.569 |
| Fractional Notes..... | 24 254,697 | 20,725,871 |
| Due Creditor...$114.256,548 | | |
| Less on hand.. 56 481,924 | 57,774,624 | 17,646,24- |
| Old-Debt, Interest ceased... | 349,420 | 356,970 |
| Total free of Interest.... | $515,538,707 | $471,889,408 |
| Total of all Debt..... | $2,366,955 077 | $2,017,099,515 |

The progressive increase of the Public Debt since 5th July last, when Mr. Fessenden succeeded Mr. Chase in office, has been as follows:

| | PRINCIPAL. | INTEREST. |
|---|---|---|
| July 5..... | $1,792,867,040 | $73.425,240 |
| August 30..... | 1,878,565,234 | 77,447,122 |
| October 31..... | 2,017.099,515 | 85,3 3.606 |
| March 31..... | 2.366,955,077 | 102,836,531 |
| Increase nine months.. | $574,088,037 | $29,411,291 |
| Average dai y increase of Principal..... | | $2,134,156 |
| Average rate of Interest yearly..... | | 4.35 per cent. |

The quarterly report of the Tenth National Bank of New-York shows as follows on a capital of $1,000,000:

| | |
|---|---|
| United States Loan..... | $1,856,000 |
| Other Loans..... | 691,890 |
| Legal Tender..... | 691,890 |
| Miscellaneous..... | 72,589 |
| Total..... | $3,525,369 |
| Capital.... | $1,000,000 |
| Surplus..... | 88,509 |
| Circulation..... | 915 590 |
| Deposits ..... | 1,521.170 |
| Dividends unpaid..... | 100.000 |
| | $3,525,396 |

The National American Bank of New-York, on its quarterly statement shows as follows, on a paid up capital of $349,000:

| | |
|---|---|
| United States Loans..... | $250,850 |
| Other Loans..... | 398 709 |
| Legal Tender..... | 163,164 |
| Miscellaneous ..... | 148,407 |
| Total..... | $961,130 |
| Capital..... | $349.000 |
| Deposits..... | 597,799 |
| Miscellaneous..... | 14.331 |
| | $961,130 |

The aggregate value of property in Illinois for 1864, as compared with the returns for 1863, is as follows:

| | |
|---|---|
| Assessed value of Property, 1864..... | $355,785,625 |
| " " " 1863..... | 331,999 871 |
| Increase in one year..... | $23,785,755 |

As most of the property is assessed at the rates far below the real value, it is believed that the real value of property in the whole State is from three to five times as great as that returned by the assessors, making the aggregate from $1,200,000,000 to $1,500,000,000

The exports of great Britain in 1864 amounted to £160,436,402. The British possessions taks one-third of these exports, the United States takes nearly £16,000,000 sterling, and Germany over £15,000,000. The remainder is distributed over the other commercial countries of the world. The United States still contiuues to be the best foreign customer of England.

The hooks of the Secretary of State, California, exhibit the following statistics of mining incorporations formed during 1864:

| | |
|---|---|
| Gold and Silver Mining Companies..... | 610 |
| Copper Mining Companies..... | 80 |
| Coal Mining Companies..... | 5 |
| Tin Mining Companies..... | 2 |
| Quicksilver Mining Companies..... | 4 |
| Salt Mining Companies..... | 1 |
| Marble Mining Companies..... | 1 |
| Total ..... | 703 |

—The Toledo and Wabash road earned in March, 1864, $132,896; 1865, $155,753. Increase, $22,857.

—The Rock Island road earned the first week in April, 1864, $38,813; 1865, $51,798. Increase, $12,980.

—The Michigan and Central road earned in March, 1864, $348,802; 1865, 344,228. Decrease, $4,574.

—The Toledo and Wabash road earned the

| | | |
|---|---|---|
| Year ending Dec. 31, 1864..... | | $2,050,321 |
| Loss operating expenses | $1,104,829 | |
| Interest and installments on funded debt..... | 493,686 | |
| Dividend preferred stock. | 69,754 | |
| Balance for com'n stock. | 382,052 | |
| | | $2,050,321 |

Or nearly 16 per cent.

The earnings of the year have been as follows:

| | | |
|---|---|---|
| Operating expenses..... | $1,104,829 | |
| Renewal expenses..... | 251,684 | |
| Construction and equipment..... | 118,923 | |
| Interest, &c..... | 493,686 | |
| Dividends ..... | 150,059 | |
| Stebbins & Co..... | 650 | |
| Total... ..... | $2,119,831 | |
| Earnings of 1864..... | | $2,050,321 |
| Surplus of 1863..... | | 147.755 |
| Stock sold in 1863..... | | 70,000 |
| Total... ..... | | $2,268,076 |
| Payments of 1864..... | | 2,119,831 |
| Surplus to credit of income..... | | $148,245 |
| The road earned in January, February and March, 1864..... | | $308,473 |
| Same time 1865..... | | 434,924 |
| Increase..... | | $126,451 |
| The road is now represeuted by bonds ..... | | $6,653,867 |
| Stock..... | | 3,427,050 |
| Total..... | | $10,080,917 |

—The Michigan Southern road shows in the first week in April an increase of $24,000.

—The Marietta and Cincinnati Railroad earned for March:

| | 1865. | 1864. |
|---|---|---|
| In fourth week..... | $31,382 80 | $29,511.72 |
| To'l this month to date. | 93,503.71 | 90,854.90 |
| Total since Jan. 1,..... | 278,242.85 | 233,534 91 |

—The receipts on the Grand Trunk Railway, for the week ending April 1, were:

| | |
|---|---|
| 1865 ..... | $139,681 |
| 1864..... | 110,298 |
| Increase..... | $29,383 |

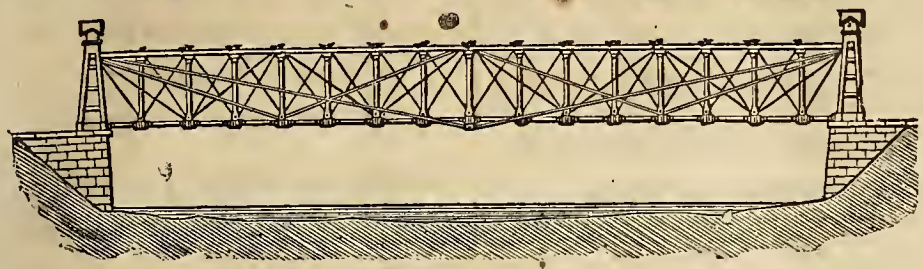
The April earnings of railways are all large. As a rule, the companies have more than they can move of freight. The Hudson River road has more passengers than ever, and could use profitably a large increase of rolling stock.

—Marietta & Cincinnati Railroad—statement of approximate earnings for fourth week in March, 1865:

| | | |
|---|---|---|
| Passengers..... | $15,829 25 | $11,645 64 |
| Freight ..... ..... | 13,868 50 | 16,776 89 |
| Mail, exp., telegraph. | 1,685 05 | 1,089 19 |
| Total..... | $31,382 80 | $29,511 72 |
| Total this month to date..... | 93,508 71 | 90,854 90 |
| To'l for the fiscal year com'ncing Jan. 1... | 278,242 85 | 233,534 91 |

An Extraordinary Vessel.—In the debate in the House of Representatives on the Naval Bill, Mr. Blow stated that there are now in the Department plans of a steamer that it is claimed can run to the city of London and back again without coaling, and destroy within the time, $500,000,000 of English property on the way and in that city, resisting all the engines of war yet devised by English skill and English gold. These plans have been submitted by one whose enterprises have ever been successful, and whose genius bas been acknowledged by the highest naval authorities.—*N. Y. World.*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 1, '53. 1y. Letter Box, 1393. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets etc, with Screws, and Thresher Teeth, made on short notice As on the most favorable terms Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

M. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done By these means the maximum useful effect of the power is secured with the least expense for attendance cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y1

---

## KNOX & SHAIN,
## Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA

---

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

Manner, at the Shortest, and on the

**Most Reasonable Terms.**

---

## Manufacturers, Importers & Dealers

—IN—

## RAILROAD, CAR,

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

## MACHINERY OF EVERY DESCRIPSION

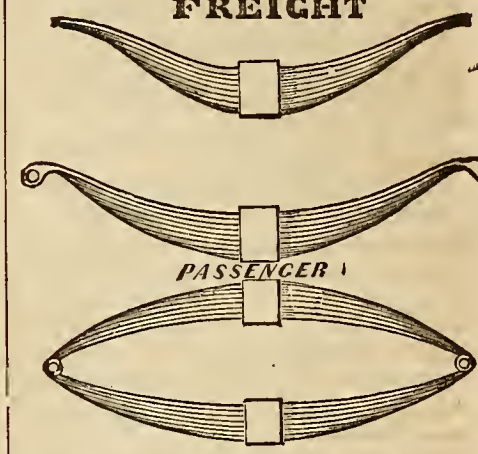
47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

## RAILWAY SPRINGS.

**FREIGHT**




THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, an one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI, O.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,
## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY

W. P. SMITH. *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent. Baltimore.*

## ittle Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express..... ..... | 6 00 A. M. | 7 30 P. M. |
| Mail and Express..... | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation..... | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation..... | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express ... ..... | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail..... | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo..... | 7 00 A. M. | 9 45 P. M |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation..... | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville..... | 5 00 P. M. | 10 20 A. M. |
| Cin & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation..... | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail..... .....6:50 A. M | | 1:10 A. M. |
| St. Louis and Cairo Accommodation.....4:00 P. M. | | 12:00 noon |
| Louisville, St. Louis and Cairo Express. ..... .. 8:00 P M. | | 8:10 A. M. |

Two trains Saturday. Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at.....4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
General Ticke Agent.

W D. GRISWOLD nera' Sup't

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis. at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:26 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets. good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street. where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD. President.
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Sept. 2 MOSELEY & CO.

BOSTON, MASS

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

**THE SCHENECTADY**

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—3 to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc;**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**



## FOUR PASSENGER TRAINS DAILY

**RAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P M; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express.

On Sundays, 10.24 P M.

☞Through connections made for all points East and West

WM. TEARNS Supt

The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, APRIL 27, 1865.

## IMPORTANT DISCOVERY.

One of the most troublesome and important problems connected with the use of steam on railways, indeed on land generally, is the incrustation of boilers from the use of water holding in solution lime and other minerals. Many remedies have been devised for this evil: but as yet none have proved entirely successful or met with very general favor. A new one has just been proposed that promises good results, by Capt. Davis Embree, of Dayton, formerly supervising inspector of steamboats on the western waters under the law of 1852—a gentleman well known to engineers and steamboatmen on the Ohio and Mississippi, and for which letters patent have been granted. Capt. Embree not only proposes to remove the scales from boilers when formed: but to prevent its formation of scales altogether.

The theory upon which Capt. Embree bases his invention is briefly:

1. That lime is the base of all incrustations in steam boilers.

2. That scales are equally found to be carbonate of lime, or limestone, in which form they are insoluble in pure water; but carbonate of lime is slightly soluble in water containing *carbonic acid*, by which the *carbonate* is converted into a *super* carbonate which is *soluble*. This is probably the condition in which lime is held in solution in ordinary hard waters.

3. The boiling of such water drives off the surplus carbon in the form of carbonic acid gas, reducing the *super* carbonate to *carbonate* of lime—which is insoluble, and settles to the bottom of the boiler, forming the incrustation or scales. Could water be thoroughly boiled before its introduction to the steam-boiler, but little or no incrustation would be formed. In the locomotive this is impossible. Some other agent, therefore, must be found for the conversion of the super carbonate of lime held in solution by the water, into a carbonate before its introduction into the steam boiler.

4. Carbonate of lime, or limestone, on being burned, is deprived of all its carbon and water of crystalization, and becomes *quick*-lime. In that state it has a great affinity both for water and carbonic acid—taking the latter from the super carbonate wherever it is found in solution and converting into an insoluble carbonate.

Taking advantage of these facts, Capt. Embree, *à la homœopathist*, adds to his hard water a portion of quick lime, when the super carbonate in solution, and the caustic lime added, are converted into insoluble carbonates and fall to the bottom—thus depriving the water of all *crystalizable* salts of lime and effectually preventing the formation of scale in the boiler. This is done by means of tanks in which the lime is thrown down and settled before the water is pumped into the boiler.

This can be readily tested by any one. Take a small quantity of quick lime, either dissolved in water or otherwise, and put it in common hard water, and it will immediately seize upon the surplus carbon of the super carbonate of lime, which thereby becomes an insoluble carbonate and falls to the bottom of the vessel—leaving the water quite pure, if the proper amount of lime has been added. This can be ascertained by any ordinary tests.

This discovery, though simple, is a very important one, and may lead to great results. The amount of lime required for ordinary hard water is very small—not exceeding one bushel to three hundred and sixty gallons of water—even when holding in solution all the super carbonate it is capable of bearing.

This invention of Capt. Embree has been pretty thoroughly tested in the machine shops of the Sandusky, Dayton & Cincinnati Railroad, and at other shops in Dayton, and in all cases has been found to answer admirably. No doubt it will prove a most admirable, simple and cheap method of rendering hard water fit for steam purposes.

For the removal of scales already formed in boilers, Capt. Embree uses still slop as being the best adapted for that purpose without injury to the iron, and withal the cheapest agent yet recommended for that purpose.

Capt. Embree has published a pamphlet on the subject, which can be obtained gratuitously by addressing him at Dayton, O.

## PETROLEUM.

OIL REGION OF KENTUCKY.

One of the remarkable examples of the influence of Art in directing the elements of Nature not only to the uses, but to the wealth of mankind, is found in refining Petroleum. Rock oil, Seneca oil, British oil, which under various names, has been known for nearly a century, and used for various purposes in its crude state; all at once, (by simply refining it) springs up as an article of vast commercial importance. It is obtained in indefinite quantities—exported to all parts of the globe, and its value counted in tens of millions. If it had not been refined, it would be yet a comparatively unimportant article. Art, or rather Science, of which Art is the practical interpreter, has conducted it from a thing of comparative little use or value, to a vast magnitude and immense wealth. This is one of the signs of our progress in physical art and expansion. There arise from this development of facts some questions of great moment, 1. Will the quantity or reservoirs of rock oil hold out? 2. In what regions is it found? In regard to the first inquiry, there are several facts, and some of them are opposite to one another. Some of the largest flowing wells have greatly diminished or nearly given out. On the other hand, new wells are constantly found in which large quantities of oil are obtained. Then arises the main question how extensive and where is the region in which coal oil may be found in remunerative quantities? This question is not yet answered with such satisfaction that people can go to oil wells with the same directness they do to coal beds. But geologists have satisfied themselves, and very nearly the public, as to the *kind* of country and rocks in which petroleum may be found. This seems to be not *in* but *around the rim of the coal basins.*

The geologists say it is found in the shale and sandstone regions. These are generally found together; but so far as we have seen or heard anything of the localities in which this oil is found, we should say that the only uniform stratum in which it is found is the sand stone. May not its original name *rock* oil be derived from this fact? May not the early observers on the natural character of this oil have been right when they supposed it to be actually *rock oil?* But this is rather a matter of curious inquiry than of utility. The *general locality* in which petroleum is found is now well known. Beginning on Lake Erie, and taking the axis of Oil Creek, we find that it passes nearly south-west on the inner rim of the coal basin and *in* the sandstone rock. We have in succession several developments; first Oil Creek; then Eastern Ohio—crossing the Muskingum and touching the Scioto; then Western Virginia—crossing the Little and Great Kanawha. Here the striking of wells stops; but not so the oil region. This crosses the Big Sandy in the same general direction; strikes the Cumberland: and follows the Cumberland river, which, for a long distance, follows nearly the same direction. Now we have reason to believe that the district where the oil section crosses the Big Sandy is the best oil region in the country, hardly excepting that of Oil Creek. The indications are very strong. Not only has oil been actually obtained there and for various purposes; but the whole geological character is strikingly indicative of rock oil reservoirs. In the valley of Paint Creek, or rather on each side of it, there has been an obvious upheavel of the sandstone, leaving the inclination of rocks such as to form great reservoirs of oil if the oil be there. But the oil *is* there and has been found and used in numerous places. We have then on the Big Sandy all the elements of a productive oil region. Time will show how far these indications are correct. But if geology be,—as it now seems to be an accu-

rate science,—then the petroleum companies will soon find a new field for their active and speculative efforts.

The Southern Bend in the Cumberland (in Kentucky) and probably in Tennessee also, offers the same indications. The indications go on to Southern Kentucky, south-west of Lexington, till it meets the *eastern rim* of the Western Coalfield, when it apparently diverges northwardly into Illinois, Indiana and finally Michigan.

We see from this, that should petroleum be, as is now supposed, a natural element of indefinite extent that the future expansion of the oil business is vast, both in the extent of the country and the quantity of production.

## ILLINOIS CENTRAL RAILROAD.

The receipts from operations of this road for the years ending December 31, 1863 and 1864, have been as follows:

| | 1863. | 1864. |
|---|---|---|
| Freight | $2,500,059 91 | $3,706 632 72 |
| Passengers | 1,797,972 12 | 2,360,394 55 |
| Extra baggage | 2,149 11 | 4 037 75 |
| Mails | 76,300 00 | 75,346 26 |
| Express | 40,869 70 | 49,757 58 |
| Rents | 15 143 17 | ..... |
| Rent of road | 54,196 64 | 59,559 78 |
| Rent of engines & cars | 17,011 42 | ..... |
| Storage and dockage | 81 49 | 127 05 |
| | $4,595,228 95 | $6,255,859 70 |
| Earnings over P. & O. Railroad | 65,797 42 | 73,587 50 |
| | $4,571,028 38 | $6,329,447 20 |
| Less operating expenses: | | |
| Salaries | $77,083 26 | $95 913 18 |
| General expenses | 83,402 14 | 126,044 59 |
| Legal expenses | 9,493 95 | 12,761 84 |
| Claims and damages | 17,086 52 | 35,627 09 |
| Station expenses | 338,303 00 | 487,809 92 |
| Train service | 104 595 66 | 520,763 91 |
| Wood and preparing | 80,692 68 | 78 946 85 |
| Coal and preparing | 165,282 14 | 287,000 72 |
| Oil and waste | 37,325 28 | 64,301 98 |
| Other supplies | 21,498 00 | 45,171 83 |
| Repairs of engines | 214,083 43 | 430 712 55 |
| Repairs of cars | 210, 33 28 | 372,583 62 |
| Repairs of tools, etc | 28,579 11 | 46,214 90 |
| Cleaning engines and cars | 25,718 55 | 47,849 35 |
| Equipment expenses | 19,130 99 | 30 802 45 |
| Repairs of road | 458,386 84 | 794,559 79 |
| Repairs of bridges | 105,948 19 | 83,877 59 |
| Repairs of fencing | 31,634 71 | 55,538 04 |
| Operating St. Chas. Air Line | 1,709 78 | 2,337 47 |
| Exchange | 544 93 | ..... |
| Rent of cars | ..... | 654 12 |
| Insurance | 19 397 23 | 20,238 66 |
| Loss & damage by fire. | 1,257 00 | 23,858 97 |
| | $2,151,786 67 | $3,460,739 29 |
| Leaving net earnings | 2,419,241 71 | 2,868,707 81 |
| Deduct charter tax | 300,394 58 | 405,514 04 |
| | $2,118,847 13 | $2,463,193 77 |
| Add amount applicable to Interest Fund as per Land Office Report | 660 244 13 | 730,970 73 |
| Add amount applicable to Free Land Fund | 151,083 67 | 290,619 67 |
| Add balance of profit and loss account, N. Y. office profits from sundry sources | ..... | 62,603 80 |
| Net amount as shown in General Balance Sheet | $2,930,174 93 | $3,547,387 97 |

Compared with the year 1863, the gross income from traffic in 1864 shows an increase of $1,758,418 82, with an increase in operation expenses of $1,308,952 72—making the increase in net earnings $445,466 10. Deducting the charter tax, the gain is $344,346 64. The balance to credit of Interest Fund Account, being amount applicable to interest and dividends, $617,313 04 in excess of the previous year. The President in his report says:

The local traffic upon the Illinois Central line, in the year 1864, was much disturbed by the requirements of the Government; the forage and other supplies for the armies in the South-west were taken to a large extent from Illinois, and the preference, which the Government had a right to demand, prevented the company from doing the private business of the line with regularity. Great dissatisfaction has existed on the line of the road. Although the rolling stock has been largely increased in the past two years, we have not kept pace with the increasing volume of our business, and require more active power. Our expenses were much larger than in previous years. From a careful consideration of the possible condition of the traffic, if peace should be at once restored, I am disposed to believe that there would be a larger amount of business than we have yet had, and with diminished expenses.

You will observe from the Superintendent's report that the increase of traffic over 1863 was 38 per cent, while the gain in net earnings is only 18.4 per cent. We are exposed to very expensive labor in the machinery and repair department while the war is in progress.

I am pleased to report the promising condition of the Land office. There has been a very active demand for land,—3,501 purchasers for 264,422 05 acres averaging $10.96 per acre, for $2,898,980 19. These sales are widely distributed and in small tracts. On the majority of them one-fourth of the purchase is paid in cash, and the balance payable in one, two and three years, with six per cent. interest payable annually in advance. A very thorough examination and adjustment of the sales made in previous years has been carried out. The arrears of interest have been generally paid. The policy of the Department has been liberal to the party actually settled upon and working the land. Great care has been taken not to dispossess any man making an honest effort to work his farm, and this course has established confidence in the company.

At the close of the year there were upwards of 15,000 individual accounts on the books of the office, and no suit or claim pending in the courts in relation to any one of them; the balance of notes and contracts on hand is $9,357,692 56. There are 1,110,553 51 acres of land for sale. The collections were double those of any previous year—$2,575,928 45; of this sum $1,440,090 56 was paid for 1,200,000 construction bonds, which have been canceled.

The following statement are condensed from the various reports annexed. From the balance of the credit of income account a dividend of 5 per cent. was declared payable 1st of February.

CAPITAL ACCOUNT.

| | |
|---|---|
| Balance as per last report | $364,928 00 |
| Receipts from Capital Stock— | |
| 9,206 shares at $90 per share | 828,540 00 |
| 113,260 shares at $10 per share | 1,132,600 00 |
| 6 per cent redemption bonds of 1890, issued | 2,086,000 00 |
| | $4,412,068 00 |
| Applied to— | |
| Pay'nt of 8 per ct. b'ds of 1865 | $46,000 00 |
| Permanent expenditures | 1,065,180 52 |
| Working stock of supplies | 458,252 78 |
| Miscellaneous assets increased | 21,783 33 |
| Cancellation of 7 per cent. construction bonds, received in exc'ge for redemption bonds— | |
| Amount thus redeemed | 1,839,000 00 |
| Premium paid in bonds on same. | 247,000 00 |
| Balance | 731,851 37 |
| | $4,412,068 00 |

INCOME ACCOUNT.

| | | |
|---|---|---|
| Balance as per last Report | | $1,328,715 88 |
| Net collections from lands, principal and interest | | 2,461,680 96 |
| Net traffic in 1864 | | 2,463,193 77 |
| Profit and loss,—N. Y. Office profits from sundry sources | | 62,603 80 |
| | | $6,316,194 41 |
| Applied to— | | |
| Interest on funded debt | | $1,000,027 50 |
| Sterling exchange | | 118,718 16 |
| Dividends on shares | | 1,665,830 01 |
| Cancellation of construction bonds— | | |
| Redeemed in cash @120 per ct. | $1,437,000 00 | |
| Premium paid on same | 287,400 00 | |
| | | 1,724,400 00 |
| Purch'ed at various rates | 291,000 00 | |
| Premium paid on same | 47,688 34 | |
| | 338,688 34 | |
| Deduct bonds on hand uncancell'd | 110,000 00 | |
| | | 228,688 34 |
| Prem. paid in cash on exchange of $1,839,000 constr'tion b'ds, for $2,086,000 redemption b'ds | | 11,675 00 |
| Balance | | 1,566,855 40 |
| | | $6,316,194 41 |

In pursuance of the measure suggested in the last annual report to supply the Trustees of the construction Mortgage in advance of the collections from the land, two proposals were made:—first, to exchange two millions of six per cent. bonds due in 1890 for the land bonds at fifteen per cent. difference, and secondly, to call in $3,000,000 of bonds under the original condition, by paying twenty per cent. premium. The exchange was made, and a large proportion of the bonds called for have been taken up; there are still $618,000 to be paid, which are coming in from day to day. It is quite probable that, in the course of present year, a portion of the Second Series of the six per cent. bonds will be negotiated at a difference of ten per cent. and give us an ample supply of construction bonds. The amount of bonds delivered to the Trustees in advance is already $2,257,000.

The shares have been paid in full;—part of our cash receipts from the lands have been applied to the discharge of the debt. When the bonds called for, with $240,000 eight per cent. bonds due March 1st, are paid, and for which we have the cash in hand, our debt will be reduced to $12,500.000.

It will be observed that the cost of the property of the company exceeds the amount of share, capital and debt; if the shareholders desire that the amount of capital issued, in the form of debt and stock, shall represent the cost of the property, and shall express this desire at the next annual meeting of the shareholders, the Directors will doubtless authorize the distribution among the shareholders of the requisite number of shares.

This property now consists of 706 miles of railway, 105 miles of sidings and double track, of 133 engines and 3,500 cars The machine shops are well furnished; the facilities for building locomotives and cars are ample. A very large outlay has been made at Chicago

and Cairo for depot and station accommodations. I do not know that the company will require any more land at any of its stations for many years; two thirds of the structures on the road are of iron or masonry:—the cost of the property stands upon the hooks at $50,000 per miles, and besides the income from the railway, you will have for many years a large revenue from the land. We have the right, by paying an annual rent, to run our freight trains over the Peoria road, which connects our main line with the Chicago branch; the company has no other engagement involving liability; it has no interest in other railway lines, and has adhered thus far strictly to the policy of taking no share in extension by branches or otherwise, and is free at this time from litigation or controversy of moment. The first debt which matures is due in 1875, ten years hence.

GENERAL BALANCE SHEET.

| | | |
|---|---|---|
| Permanent expenditures | | $29,675,409 75 |
| Interest & divi'nd account | $8,066,496 10 | |
| Loss avails of int. fund | 3,547,387 97 | |
| | | 4,521,108 04 |
| Net cash assets, N. Y. | $2.128,304 47 | |
| Net cash assets, Chicago | 107,402 30 | |
| | | 2,298,706 77 |
| Miscel. assets, N. Y | $29,197 32 | |
| " Chicago. | 128,337 79 | |
| | | 157,535 11 |
| Prem. paid on bonds delivered Land Department in anticipation | | 353,672 78 |
| Working stock of supplies | | 1,073,677 55 |
| | | $38,080,110 00 |
| Capital stock | | $20,808,100 00 |
| Cancelled bonds scrip | | 169,010 00 |
| Construction bonds due— | | |
| April 1, 1875, 7 per cent. | $7,970,500 | |
| April 1, 1875, 6 per cent. | 2,896,500 | |
| Eight per ct. bonds, due March 1, 1865 | 241,000 | |
| Optional right bonds due Feb 20, 1868. | 33,000 | |
| Redemp'n bonds due April 1, 1890 | 2,086,000 | |
| | | 13,232,000 00 |
| B'ds deliver'd Land Department | 6,128,000 | |
| Less in hands of the Trustees | 2,257,000 | |
| | | 3,871,000 00 |
| | | $38,080,110 00 |

CAPITAL STOCK.

| | | |
|---|---|---|
| Of the 255,000 shares 211,081 have been issued and paid in full | | $21,108,100 00 |
| From which deduct amount carried to interest fund in 1851. | | 300,000 00 |
| Total as above | | $20,808,100 00 |

NET CASH ASSETS.

| | | |
|---|---|---|
| Cash assets N. Y. office | | $2,551,370 39 |
| Less sundry coupons and dividends | | 423,065 92 |
| | | $2.128.304 47 |
| Cash assets Chicago. | $681,075 83 | |
| Less liabilities | 310,673 53 | |
| | | 170,402 30 |
| Miscellaneous assets N. Y. | | 29,197 32 |
| " " Chicago. | | 128,337 79 |
| | | $2,456,241 88 |

INTEREST ACCOUNT.

| | | |
|---|---|---|
| Construction bond coupons of April and October | | $950 212 50 |
| Interest on Optional right bonds | | 2,135 00 |
| " Eight per ct. bonds.. | | 20,920 00 |
| " Redemption bonds... | | 26,760 00 |
| Premium on Sterling Exchange to pay coupons in London | | 118,718 16 |
| Divi'd of Feb., 1864. | $792,812 80 | |
| " Aug., 1864. | 806,122 80 | |
| U. S. tax on above... | 66,894 41 | |
| | | 1,665,830 01 |
| Add dividends paid in cancelled bonds scrip in October, 1858, and Jan. 1862, which scrip has since been converted into capital stock | | 1,772,270 00 |
| Add amount at debit of this account in last annual report | | 3,511.650 34 |
| Total amount at debit as shown in General Balance Sheet | | $8,068,496 01 |

PARMANENT EXPENDITURES.

| | |
|---|---|
| Construction | $431,505 58 |
| New equipment | 567,036 69 |
| Engineering expen's in Illinois. | 1,370 00 |
| Land and right of way | 681 92 |
| Cairo City improvement | 49,104 33 |
| Twelfth street crossing | 15,482 00 |
| | $1,065,180 52 |
| Add balance at debit of this account in last annual report | 28,610,229 23 |
| Total amount as shown in General Balance Sheet | $29,675,409 75 |

From the report of the Superintendent we learn that the motive power and rolling stock have been well maintaines, and will compare favorably with its condition at the time of any former report.

The number of miles run by engines with passenger trains during the year was 942,580; with freight trains, 1,997,709; with construction trains, 75,826; with wood trains, 4,620; with switching trains, 366,155—total, 3,386,850, an increase over the previous of 367,153 miles. Average number of cars hauled, 12.77; pounds of waste used, 56,230 gallons of oil, 33,411; cords of wood, 19,319; tons of coal and coke, 87,967. Cost of repairs, $473,322 99. Cost of repairs per mile, 13.97 cents. Cost of wages, 5.56 cents. Cost of cleaning, 1.05 cents. Cost of fuel, 11.57 cents. Cost of oil, waste and tallow, 1.35 cents. The entire cost per mile run by locomotives, including oil and waste, fuel, wages of enginemen and firemen, and repairing and cleaning engines, has been 33.52 cents, against 22.28 cents in 1863, and 17.42 cents in 1862; the total cost being $1,125,298 68, $670,802 43 and $446,125 82 respectively.

The expenditures on accouut of machinery department have been large, owing to the increased cost of labor aed material, as well as the extraordinary expenses incurred where machinery is overtaxed. The necessity of working overtime and at nights, in order to keep the motive power in working order, owing to the scarcity of skilled machinists, added at least 100 per cent. to the cost of the work so done, over what it would have cost had the work been done at regular time.

The number of locomotives belonging to the company is 126; of these 107 are using coal as fuel, 15 having been changed from wood-burners during the year, and 10 new ones added. Fifty-one have received thorough repairs, of which 22 were rebuilt. Three have been built at the company's works during the year, and six more now under way will be completed before the close of summer.

The company have 68 passenger cars, 29 baggage, mail and express cars, 2 officers' cars, 1 pay car and 7 sleeping cars; 3,275 freight cars; 9 derrick, wrecking and tank cars; and 14 snow plows. There have been added to the rolling stock during the year, 6 new passenger and 320 freight cars. Ten passenger and two mail and baggage cars were rebuilt, and with 56 house and caboose cars were re-roofed with tin; 43 house and 82 platform cars were rebuilt; 479 cars of all classes received thorough repairs, and 530 were re-painted. The cost of repairing passenger cars was 2.58 cents, aud of freight cars 0.73 cents per mile run.

In addition to the motive power and rolling stock that have been charged to permanent expenditures during the year, there has been a large amount of shop machinery and tools supplied to the various shops.

The amounts charged on account of road department for the year have been $941,835-76 to operation, and $498,143 83 to permanent expenditures. These expenditures, for the reasons stated, are much in excess of the previous year for amount of work done; on operation account, including repairs of roads and bridges, and repairs of station buildings, water tanks, whnrves and basins, the increase is $324,933 88 over 1863. The cost of repairs of road and bridges for each mile of road was $1,238 25; and for each mile run by locomotives was 26 cents, being an increase of $440 04 per mile of road, and 7.26 cents per mile run by locomotives, over 1863. There were used in the repairs of road during the year 250,307 cross ties, 255,819 lbs. spike, 35,338 chairs, 26,858 fish plates and bolts, 14,417 bars re-rolled iron, 2,079 bars new iron, 12,753 bars repaired iron, and 10,230 bars old iron. The average cost of repairing iron was $1 18 per bar. The bridges and station buildings have received thorough aud in many cases extensive repairs. There have been 10.23 miles of ballasting completed since the last report; 17,113 feet, or 3.24 miles of new sidings have been laid and 1,404 feet of new fencing built.

The proportion of operation expenses to earnings is, exclusive of charter tax, 54 per cent., being an increase over 1863 of 7.6 per cent.; and inclusive of charter tax 60.4 per cent.

Number of passengers carried, 1,108,937—an increase of 256,278. Number carried one mile, 96,811,726—an increase of 23,732,974. Average number of miles traveled by each passenger 87.30. Revenue per mile 2.44 cts. Do., per mile of road, $3,338 61.

Tons of freight transported, 1,022,024—an increase of 69,210. Tons carried one mile, 153,271,668—an increase of 18,494,264. Average distance each ton was carried 150 miles. Revenue per ton per mile 2.51 cents. Average revenue per ton $3 77. Tons of freight carried one mile north, 48,785,788: do south, 104,385,880. Tons of local freight carried, 837,763; do., carried one mile, 131,018,340; do., carried one mile north, 41,513,890; do., south, 89,504,450. Tons of through freight, 184,261; do., carried one mile, 22,153,228; do., carried one mile north, 7,271,898; do., south, 14,881,430.

LAND DEPARTMENT.

From the report of the Land Department we learn that the total land sales in 1864 were 264,422 05 acres, for $2,898,980 10. The aggregate sales from commencement to Jan. 1, 1865, were 1,484,446 49 acres, for $17,548,436 81. The unsold lands amount to 1,110,553 51 acres.

The following is a statement of transactions the Land Department for the year 1864

and general statement of accountsto Dec. 31, 1864:

| | | |
|---|---|---|
| Land notes and cont'cts on hand as per report of 1863 | | $9,914,008 56 |
| Received in 1864 | $1,944,681 25 | |
| Canceled in 1864 | 1,219,234 68 | |
| | | 725,446 57 |
| | | $10,639,455 13 |
| Payments in 1864 | | 1,281,762 57 |
| | | $9,357,692 56 |
| Treasurer I. C. R. R. Co., remitted him as per report Dec. 31, 1863 | $2,549,047 63 | |
| Remitted him in 1864 | 561,983 52 | |
| | | 3,111,031 15 |
| Construction bonds canceled as per rep't of 1863 | $2,671,000 00 | |
| Canceled in 1864 | 1,200,000 00 | |
| Prem. paid on do. | 315,018 75 | |
| | | 4,186,018 75 |
| Free land bonds canceled as per report of 1863 | $138,000 00 | |
| Free Lands Fund as per rep't of 1863 | 377,908 02 | |
| Remitted Treasurer account Free Land Fund in 1864 | 290,619 67 | |
| | | 806,527 69 |
| Expense account as per report of 1863 | $563,557 89 | |
| Expenses of 1864 | 124,017 08 | |
| | $687,574 97 | |
| Less pay'nts forfeited on canceled sales, 1864 | 80,334 90 | |
| | | 607,240 07 |
| Allowed from notes for prepayment and other causes, as per report of 1863 | $115,567 95 | |
| Allowed in 1864 | 63,255 85 | |
| | | 178,823 80 |
| Cash on hand | $117,980 18 | |
| Notes receivable | 6,114 83 | |
| New office building | 32,661 41 | |
| Sundry assets | 5,746 75 | |
| | | 162,503 17 |
| Defaulting agents | | 12,948 72 |
| Expenses on purchased lots and lands | | 26,183 38 |
| | | $18,448,969 29 |

| Acres. | Land sales, 1874. | Cash. | Notes, etc. |
|---|---|---|---|
| 207,085 | Construction lands | $642,348 | $1,496,741 |
| 47,487 | Free lands | 124,146 | 346,800 |
| 9,850 | Interest lands | 68,118 | 67,167 |
| | Donated T. L. | 30,106 | 15,372 |
| 264,422 | | 865,348 | 1,926,080 |
| 1,093 | Purchased lands | 9,525 | 5,050 |
| | Purchased T. L. | 11,695 | 13,551 |
| 265,520 | Total | 886,538 | 1,941,681 |
| 1,313,104 | Total to Dec. 31, 1863 | 1,246,749 | 14,088,770 |
| 1,578,624 | | 2,133,287 | 16,033,451 |
| 92,349 | Canceled in 1864 | 10,153 | 1,219,234 |
| 1,486,275 | Total sales to date | 2,123,134 | 14,814,217 |
| | Cash | | 2,124,134 |
| | Interest account | | 1,435,161 |
| | Suspense accounts | | 76,457 |
| | | | $18,448,969 |

CONSTRUCTION BONDS CANCELED.

| | | |
|---|---|---|
| Amount surrendered to the Trustees by the company as per rep't of 1863 | | $2,671,000 00 |
| Surrendered in 1864 | | 1,200,000 00 |
| Making in all | | $3,871,000 00 |
| Applied on the issue of deeds as per rep't of 1863 | $1,793,688 77 | |
| Appli'd in the same manner during 1864 | 1,315,456 91 | |
| | | 3,114,145 68 |
| Leaving canceled Construction Bonds in Trustees hands Jan. 2, 1865 | | 756,854 32 |
| To which add amount of bonds surrendered Jan. 14, 1865, in advance of receipts on construction lands sold | | 2,257,000 00 |
| Making the aggregate in Trustees' hands | | $3,013,854 32 |

## NORTH MISSOURI R. R. BONDS.

STATEMENT OF JOHN F. HUME, STATE FUND COMMISSIONER.

By an act of the Missouri Legislature, approved February 16, 1865, the North Missouri Railroad Company is empowered to issue bonds for six millions of dollars, for the purpose of securing the completion of its road and branches, so as to form a connection between the city of St. Louis and the railroads penetrating the States of Iowa and Kansas, and construct a bridge for its cars over the Missouri River at the city of St. Charles. These bonds are, by law, denominated "First Mortgage Bonds of the North Missouri Railroad Company," and are to be issued in sums of one thousand dollars each, and will bear seven per cent. interest, payable semi annually, with interest coupons attached, and will have thirty years to run before maturity. In the State of Missouri they are exempted from all State, county, and other local taxes. As their name implies, the bonds are to be first mortgage bonds, secured by a first lien, not merely on the portions of the road they are intended to aid in building, but likewise upon so much of the road as is already finished—170 miles—together with all the rolling stock, depots, machine shops, and other appurtenances belonging, both now and hereafter, to the road. To authorize the execution of such a mortgage, the State—in the act referred to—has relinquished a first lien on the road already built, for the sum of $4,350,000, being assistance rendered by the State to the company in aid of its work already done, and takes a second lien on the entire road and branches. A mortgage to the effect above described has been executed by the company, and the bonds will soon be in the market.

As Fund Commissioner of the North Missouri Railroad Company, by apnointment of the Governor of the State, charged by law with the duty of selling these bonds, and directing the application of the proceeds to the objects specified, it is proper that I should state such facts as go to determine their value, for the information of parties seeking an investment in such securiteis.

With this view, three points suggest themselves as being those upon which such parties would chiefly desire to be satisfied. First, the sufficiency of the security for the principal of the bonds; second, the paying capacity of the company, as showing its ability to promptly meet the interest; and third, which is rather preliminary to the others the sufficiency of the bonds, if sold at fair rates, to finish the road.

On the first point, it would appear to be sufficient to state that the bondholders will not only have a first lien on all the road to be constructed and equipments acquired with their money paid in the purchase of the bonds, but also on other means in possession of the company which will be applied to the same end. For instance, in the construction of the West Branch to Kansas, the company has, as assets to be used, 25,000 acres of land in Chariton County, conveyed to it by a company previously organized to build a road on this line. Much of this land is valuable, the whole being now estimated at $75,000. It has fifteen miles of grading done, worth $75,000. It has a subscription by Carroll County of $175,000, and another by Ray County of $200,000. The city and county of Leavenworth have each voted a subscription of $250,000 to aid in building the road to that point. A deep interest is taken along the entire line in the early completion of the road, and liberal contributions to that end may safely be anticipated from counties and individuals interested in the matter, as well as a general donation of right of way, &c.

Of the main line to Iowa, above Macon, the present terminus of the completed road, twelve and a half miles are graded, while the counties of Schuyler and Adair each owe $35,000 on subscriptions. On this portion of its line the company has finished its surveys and accomplished a good deal toward obtaining right of way and depot grounds. Great anxiety is likewise felt along this portion of the line for the early building of the road; and as it, as well as the West Branch, penetrates a country of considerable wealth, some local aid may be expected. Whatever assistance is thus obtained, adds to the security of which the bondholders get the benefit. The company, it is proper to add, has no floating debt, but on the contrary, has a considerable cash balance on hand, from the earnings of last year.

But the most tangible security which is offered to the purchasers of these bonds consists of one hundred and seventy miles of completed railroad, in good running order, well stocked with locomotives and cars, and doing a profitable business. This portion of the road, connecting St. Louis with the Hannibal and St. Joseph Railroad, at Macon City, and thus enjoying an advantageous connection, was built in the years 1855, 1856, 1857 and 1858, at a cost of $7,000,000. Although much the most costly and difficult portion of the line, it was built at a less cost per mile than any road in the State, and yet is the best constructed of all the Missouri railroads. In addition to the road itself costing the above mentioned sum, the company owns and has in use rolling stock, machinery, other property, worth, at present prices, nearly one million of dollars, which is likewise covered by the mortgage securing the bonds.

All of this property, as before stated, was subject to a first lien in favor of the State, for the sum of $4,350,000 advanced in aid of the road's construction; but as will be seen by the act of the Missouri Legislature, hereinafter given, the State has relinquished its lien in favor of the holders of the six million bonds taking a second lien on the entire road, regarding that as ample security. This shows what estimate is placed upon this enterprise by the parties immediately representing the interests of the people of Missouri, who ought to be most familiar with the subject.

That portion of the line now finisbed is 170 miles in length; the contemplated northern extension is 68 miles; the West Branch 150 miles—making in all, when finished, 388 miles of road, having its main terminus in the largest city on the western half of the continent, and penetrating the richest districts of the State of Missouri, with connections of the most favorable character—costing, road and equipment, with the strictest economy, not less than fourteen millions of dollars, and

this is offered as security for six millions. Who can doubt its sufficiency?

Next, as to the ability of the company to pro uptly meet the interest on the bonds. The money for this purpose must come from the earnings of the road. The company has, as already stated, 170 miles of its road finished and stocked, which has been in operation for the past seven years. During this time, notwithstanding the greater portion of it has been a period of cival war in Missouri, the road has not only paid expenses, but yielded a reasonable profit. That an idea of its business may be had, I give the following statement of its gross earnings for the last three years:

| | |
|---|---|
| Total receipts in 1862 | $438,434 43 |
| " " in 1863 | 636,248 24 |
| " " in 1864 | 911,286 84 |

This exhibits a handsome annual increase; but perhaps a better evidence of the growth of the company's business may be gathered from a showing of its monthly receipts for 1864, which are as follows:

| | |
|---|---|
| January | $47,316 50 |
| February | 70,949 14 |
| March | 83,339 06 |
| April | 65,604 93 |
| May | 63,328 21 |
| June | 61,411 94 |
| July | 59,370 31 |
| August | 89,130 35 |
| September | 94,530 62 |
| October | 33,752 65* |
| November | 109,321 57 |
| December | 132,233 55 |
| Total | $911,286 94 |

* October, 1864. In this month Price's raid caused almost a total suspension of business in Missouri.

The net earnings of the road for the fiscal year ending the 1st of March, 1865, amounted to $309,857 85, nearly sufficient to pay the interest at seven per cent. on $4,500,000. There is every reason to believe that, as the State fills up with population, these net earnings from the main line will increase.

The Hannibal and St. Joseph R R., for the last year of its business, earned $2,000,000. This road is 207 miles long. The West branch of the North Missouri road will be 150 miles long, passing through a much more thickly settled portion of the State, and will reach Kansas City, Leavenworth, and by the Platte county road, Atchison and St. Joseph and points north of St. Joseph to Council Bluffs. It is reasonable to estimate that the earnings of the West branch alone will be, when finished, over $1,000,000. As the whole of its business must pass over the 170 miles of the North Missouri road now completed, it will, undoubtedly, increase the present earnings of the main line one million of dollars. From the best data to be obtained, it is estimated that the extension to Iowa will give not less than one million of additional business for the whole road from Iowa to St. Louis:

| | |
|---|---|
| The present earnings then are for a year, say | $1,000,000 |
| The building of the West branch in its own business $1,000,000, and the increase to the main line $1,000,000 more | 2,000,000 |
| The extension to Iowa will give, at least, annually, a million more to the business of the road | 1,000,000 |
| Total | $4,000,000 |

When the road is fully completed it ought to be operated on less than 60 per cent. of its gross earnings; but, say it should take 70 per cent. of its gross earnings, this would leave $1,200,000 for interest, and it is confidently believed that this result will be more than realized. If so, then the net income will not only pay the interest on the $6,000,000, but also on the debt of the road to the State, and make the road a dividend paying road to its stockholders.

| | |
|---|---|
| The interest on $6,000,090 of first mortgage bonds, at 7 per cent., is | $420,000 |
| The interest on the $4,350,000 of State bonds, issued to the road heretofore, a 6 per cent., is | 261,000 |
| Total | $681,000 |

To pay which the company will have twelve hundred thousand, or nearly three times as much as will be required to pay the interest on the $6,000,000 of first mortgage bonds.

To correct any possible misapprehension, it may be proper to state that the earnings of this road have been increased by Government business, but on the contrary, the effect of the war in Missouri has materially decreased them from what they would have been. The total receipts of the road from Government for the last three years are as follows:

| | |
|---|---|
| Government transportation in 1862 | $74,006 75 |
| " " 1863 | 47,516 96 |
| " " 1864 | 57,596 57 |
| Total for three years | $179,020 28 |

To say nothing of the actual losses of property to this company destroyed by rebels The products of the country to be shipped over the road, and the importation to supply it, have been greatly diminished in consequence of the presence of war among us, by which the company has been occasioned a loss that would far exceed any receipts from the Government for its transportation.

Located as the North Missouri Railroad has been for the past four years—the greater portion of the time in the midst of an active theatre of war—it is easy to understand the embarrassment under which it has labored. Its losses in property, destroyed by the enemy in that time, have amounted to not less than $300,000, while its business has, at intervals, been entirely suspended, and at all times greatly lessened, from that cause. This difficulty—with the restoration of peace and order in Missouri, which may now be anticipated, the change of Missouri from a slave to a free State, which is already accomplished, and the influx of a loyal immigration, which has vigorously begun—may now be regarded as permanently removed. The effect upon the business interests of the road must be most salutary. The company, I doubt not, with its present working line alone, would, from this time on, be able to pay from its net earnings the interest on the entire six millions bonds. It is proper, however, to state, that in view of the importance of promptly meeting the interest on any bonds sold, when a failure involves the forfeiture and possible loss of such valuable interests, as well as from a desire to sustain the credit of the road, the policy to be rigidly pursued will be to sell only so many bonds under the mortgage, that the interest upon them will, beyond all contingency, be punctually met at maturity.

With regard to the third point, the sufficiency of the bonds, if sold, to insure the completion of the contemplated lines of road, as well as to build the bridge over the Missouri, it is enough for me to say that, according to careful estimates of those most competent to judge of such matters, there seems to be no doubt on the point. It must be recollected that the completion of a portion of a road greatly facilitates and cheapens the construction of the balance, as rolling stock for the transportation of material is then at hand without additional expense. The sections of country to be penetrated by the contemplated branch and extension of the main line are unusually favorable to railroad building, being made up in great part of level prairies, requiring merely a surface grade, with few streams to cross and bridge. Competent engineers estimate the entire cost of the branch and extension as not to exceed $25,000 per mile, and of the bridge over the Missouri at half a million of dollars. The Company, in applying to the Legislature for the privilege of issuing first mortgage bonds, made certain of asking latitude enough, in connection with its other available assets, to be sure of finishing the work, intending, however, to sell only so many bonds as may be actually necessary.

To any one interested in the subject, it is important that he study the map that he may form an accurate judgment of the business advantages which the completed road will enjoy and the profits it will yield. It will be seen that with its branches it penetrates the richest agricultural districts of Missouri, especially with its West Branch, which passes up the Missouri river valley, the garden portion of the State, thus making sure of a profitable local business. Its prospect for connections is also worthy of observation. The main line from St. Louis now connects at Macon City with the Hannibal and St. Joseph Railroad, a well known Western artery for freight and travel. At Liberty, in Clay county, the West Branch is within eight miles of Kansas City, the eastern terminus of the Union Pacific Railroad, one of the National Pacific branches endowed by Congress with Government aid, which is now finished and in operation westward from Kansas City, in Missouri, to Lawrence, in the State of Kansas. From Liberty to Kansas City the grading for a road is already done, which is tendered to the North Missouri Company, on condition that it will lay a track upon it. Further to the northwest, this branch strikes the Missouri river, opposite Leavenworth, the principal city of the State of Kansas, from which point a branch of the Union Pacific Railroad is building westward, and which the Union Pacific Railroad is bound to complete within two years from this time to Lawrence in the State of Kansas, or forfeit most valuable rights acquired under act of Congress, on condition that this work should be done in a limited time. Seven miles further on, it reaches Weston, from which the Platte Country Railroad is already built and in operation northward by way of Atchison and St. Joseph, to Savannah, in Andrew county, a distance of fifty-two miles. The Platte Country Railroad is, by law, compelled to lay a third rail at its own cost to St. Joseph, of the same gauge of the North Missouri Railroad, on which the North Missouri Railroad Company has a right to run its engines and cars.

At Atchison a connection is formed with the Atchison branch of the National Pacific road, one of the lines having Government aid, and now in course of construction. From Elwood opposite St. Joseph, another railroad is projected westward and partly built through Kansas, with which a connection is had at St. Joseph. The Platte Country road is located as far north as Forrest City, on the Iowa line, and the company is bound to complete its road to that point in three years from last February, or have it forfeited to the State. From Forrest City, up the Missouri valley to Council Bluffs, opposite Omaha, the eastern terminus of the Northern Branch of the Na-

tional Pacific Railroad, (likewise having Government aid,) a company has undertaken the building of a road in connection with the Platte Country and the North Missouri, which is now under contract, and twenty miles of its line graded. It will thus be seen that the Forrest City and Council Bluffs, the Platte Country and the North Missouri, will, in fact, constitute but one road from Council Bluffs to St. Louis, 495 miles in length, connecting with and tapping every east and west road at present contemplated west of the Missouri river, thus giving the North Missouri road thousands of miles of railroad, both to the east and west, tributary to its business, and must make it one of the best paying roads in the United States.

It will likewise be seen that the North Missouri extension from Macon City strikes the Iowa line at a point thirty miles south of Ottumwa, on the Des Moines Valley road. Arrangements are now being made for the filling up of this link. The Des Moines Valley road, besides penetrating the richest portion of the State, is designed to intersect and connect with all the east and west roads crossing Iowa, and ultimately unite with a road traversing the valley of the Minnesota to St. Paul thus creating a through line, with the North Missouri, from St. Paul to St. Louis, a distance of six hundred and ninety-two miles.

Thus it will be seen, that the North Missouri, with its branches and feeders, will reach the entire country west of the Mississippi and north of St. Louis, supplying it with a southern market, and constitutes the only system of roads that will do so. At St. Louis, besides striking the roads diverging eastward, it connects with the Iron Mountain Railroad, running due south on the western Bank of the Mississippi, designed to reach Memphis or Columbus, below freezing point, to connect with roads leading to New Orleans, Mobile and Charleston. Of the Iron Mountain road, eighty-six miles from St. Louis are constructed and in operation. One hundred miles more will carry it from the Iron Mountain to which it is completed to Columbus, at which point railroad connection is had with the Mobile and Ohio Railroad, which gives by railroads now in operation an outlet to Charleston, Mobile, New Orleans, and every Southern city reached by rail of importance. The North Missouri and the Iron Mountain together will furnish the only line of railroad west of the Mississippi between the great Northwest and South; and a large portion of the year, when the northern rivers are impeded with ice, will supply the only direct means of communication between them.

I have thus endeavored to give a full and candid statement of the claims of the North Missouri Railroad to the confidence of the financial public, that men possessed of capital may see the security upon which they will rely in purchasing the bonds of that road, which I have to offer.

It is proper that I should say that I am not an officer or employee of the North Missouri Railroad Company nor even a stockholder in it. I am an officer of the State, receiving my appointment from the Governor. Into my hands, as a representative of the State, the railroad company, in pursuance of the legislation before referred to, and which is assented to by the Company, places its bonds and the application of their proceeds, as well as the receipts and earnings of the road, in consideration of the State's relinquishment of her first lien, that the State's interest in the second lien may be protected by her own agent. As whatever contributes to the security of the second lien likewise operates in favor of the first lien, it will be seen that my official position makes me practically a trustees both for the State and the holders of the bonds under the first mortgage, binding me to guard their interests in opposition to those of the railroad company, should any conflict arise.

It gives me much pleasure to say, however, that no such conflict is anticipated. The officers of the North Missouri Railroad Company are gentlemen of high standing, and familiar, from long experience, with the business they have in hand, in the management of which they have been eminently successful. The President of the Company, the Hon. Isaac H. Sturgeon, is widely known among the most faithful and competent railroad men of the country—thoroughly devoted to the interests of his company, with the duties of whose business he is entirely conversant, having filled his present responsible position for seven years.

The act of the Legislature has been accepted by the stockholders of the Company, as herein provided, and the mortgage under it has been duly executed and recorded. The bonds issued under a former law, and required to be destroyed, have thus been disposed of, and the bonds issued under the present mortgage will, in whole or part, soon be placed upon the market. The trustees representing the bondholders in the mortgage are John J. Cisco, Morris Ketchum, and John A. Stewart, of New York.

## JOURNAL OF RAILROAD LAW.

Liability of Bank to Owner of its destroyed Notes.—What transfers Property to carried in goods lost in transitu. Question of fact for Jury.

The recent case of The Adams Express Company *vs.* The Hagerstown Bank was an action to recover of the defendant $3,315 of its notes, which the plaintiff averred was their property, and which had been cancelled or destroyed, whereby the bank was relieved from all liability to redeem them.

The facts of the case were as follows:

On the 6th of October, 1860, a package containing $9,455 of defendant's bank notes was made up at the Merchants' Bank of Baltimore, and received by plaintiffs to be delivered to defendant. When it was opened on the 8th of October by the defendant at Hagerstown, it contained but $6,095—$3,360 having been abstracted from the package, and a bundle, made up of newspapers cut to the proper size, substituted. The plaintiffs were informed of the loss, and their superintendent on the 11th of October went to Hagerstown and gave his check to the defendant's cashier for the amount of the loss. When the check was given, the cashier of defendant gave plaintiffs' superintendent his receipt for the $3,360. The efforts of plaintiffs were then earnestly directed to ascertain by whom the money had been taken. Circumstances indicated a young man named Simmons, who was subject to occasional attacks of insanity and who was then temporarily employed by the plaintiffs, as the person who had taken the money. He was privately questioned as to his knowledge of its loss, and upon being assured that he would not be prosecuted if he told the truth about the matter, he confessed that he had taken the money from the package, at the express office in Harrisburg, on the 8th of October, about one o'clock in the morning, that he took it home to his father's house, and put it in a box, where it remained until October 13th, when he took it, except $45, to Wetzels Swamp, about two miles from Harrisburg, and burned it there. The amount of the sum burned was therefore, according to the confession, $3,315. After this confession Simmons, accompanied by four gentlemen, went to the place where he said he had destroyed the notes A quantity of cinders and ashes was found, showing the character of the paper burned. There were also found a number of pieces of defendant's notes, which were produced and identified at the trial. From the evidence on the trial it was shown that young Simmons, at the time he broke the package and took the notes, was in "one of his spells," or fits of insanity, and it was also proved that after these attacks he had always a clear and distinct recollection of all that took place whilst his mind was under their influence.

On the 1st of April 1861, after tendering to defendant a bond of indemnity, this suit was brought. There was only one error assigned as to the admission of evidence on the trial in the court below, which was to the deposition of this Simmons, because of his interest in the question, the want of authority for the execution of the release, which was offered for the purpose of restoring his competency, and the inducements held out to him by the promise not to prosecute if he would make a full confession.

Under the instructions of the court, there was a verdict and judgment in favor of the plaintiffs for the amount claimed ($3,315), whereupon the defendant sued out a writ of error and the case was afterwards argued before the Supreme Court of Pennsylvania, and the following opinion was delivered by that Court, by

WOODWARD, J. We agree with the learned counsel of the defendants, that the money in controversy was not recoverable as for money paid by mistake. There was no mistake of facts in the payment. The express company had undertaken to carry $9,455 of money from Baltimore to the Hagerstown Bank. It was the bank's property, and the carrier was bound by law to deliver it to them. An agent or clerk, of the express company stole $3,360, from the package during the passage. It was the duty of the company to make good this sum to the bank. The bank could have recovered against them at law. When the plaintiffs' superintendent, therefore, on the 11th Octher, paid to the bank $3 360 in settlement of the claim, he did only what the law would have compelled his company to do, and the bank received only what they were entitled in equity and good conscience to receive and retain. So far from being a payment in mistake of legal rights and duties, it was a payment in discharge of clearly ascertained legal rights and duties.

But the consequence of such settlement and payment was to transfer the property in the notes from the bank to the express company. The bank having received the value of the notes, had no further rights to the notes themselves, and were bound to redeem them when presented, as they would redeem any other paper issued by them. Simmons, the company's agent, had the custody of the notes, but he had acquired no property in them, for he had taken them from his employers feloniously. He was bound in law and conscience to return them to his employers, in whom the title had now vested absolutely; and whilst he retained the custody, he must be considered as holding in trust for them. Whatever of the notes he passed away was the company's loss, and whatever he destroyed enured to their benefit, for it entitled them to claim so much money

from the banks as for destroyed notes of their issue.

It is argued that a wanton destruction by their own agent could give the company no right of action. To this we can not assent. Even if a careless and unintentional destruction of bank notes by an agent, in the course of his duties, would not give the principal an action against the bank that issued them, a proposition which we do not mean to affirm, it is very clear that a wanton destruction by a faithless agent, not in pursuit of the duties for which he was employed, but in gross violation of them, can not be imputed to the company as their wrongful act. It was their duty to employ honest and faithful agents, and when in pursuit of their calling as common carriers, their agent failed to deliver all the money they undertook to deliver, they were, as I have before said, clearly responsible to the bank for his negligence and fraud. But when, by settlement with the bank, the company had become the owner of the notes in question it was a fraud on *them*, not on the bank, to surreptitiously destroy the notes. It was like a malicious destruction of any other property of the employer by an unfaithful servant. What right has the bank to profit by his fraud on his employers? By what rule of law or of morals can they adopt his wrongful act and appropriate it to their benefit? Ordinarily an employer is not responsible to third parties for the wilful wrong of a servant, even in the course of his employment; but here was an act, the destruction of the notes, which was not in the course of the agent's duties, which was not injurious to the bank, for if not destroyed, the bank was more certainly liable to redeem the notes than if they were destroyed, but which was a great wrong to the employers, and to nobody else. Now, to treat the bank as the injured party, and the express company as the wrong doer, would be an extremely artificial view of the case and a strange inversion of legal principles. The real question in the case was whether there was adequate evidence of the destruction of the notes. Upon general principles of law, no man loses his right either to real or personal property, or to a chose in action, by losing the evidence of it; but if he can not produce the primary evidence, he is bound to account for its absence and to produce secondary evidence that shall be reasonably satisfactory to a court and jury. As long as a bank note exists, the bank is liable to redeem it in the hands of the bearer, and therefore it is necessary for a party who calls on a bank to redeem notes without producing them, to prove something more than mere loss, because though lost to the real owner, the bank remains liable to the finder. But if their destruction can be shown, there is an end of the bank's liability to some casual holder, and the owner may recover them. The cases are all cited in the argument, two of the best of which are Bullet *vs.* The Bank of Penn., 2 Wash. C. C. R., 172, and Martin *vs.* The Bank of U. S., 4 id., 255, both of which were cases in which the owners of bank notes had cut them in twain, and lost one part and presented only the other part. The banks were held liable as for destroyed notes. In such cases the evidence is complete, for the part produced is sufficient to identify the note, and the mutilation and loss of half, is the destruction of the whole for all legal purposes. The case most relied on for the defendant is that of Tower *vs.* The Appleton Bank, decided in the Supreme Court of Massachusetts in 1862, and reported in 3 Allen, 387. "There was evidence tending to show that the plaintiff left the bills in question in his trunk in his room, in a house in Chicago, which was burnt within an hour afterwards, and that no person entered the room after he left it, and that the trunk and its contents were burnt with the house." This is all the account the report gives us of the evidence, and the court held it insufficient to prove destruction of the bank notes. The Court intimated, that if "the bills were shown to be actually destroyed beyond all question of controversy," the bank would be liable, but such proof as was before them they held insufficient.

And so it is maintained in this case, that there was a defect of proof on the main point. On looking through it, we think the Court could do no less than submit it to the jury, and we can not conceive how it could have been submitted in a manner more clear and fair. The precise amount of notes burned was not fixed, except inferentially, but the jury had ample grounds for the inference they made.

The witness Simmons was legally competent, notwithstanding his physical and moral infirmities, for he was called to testify against his interest. His testimony was referred to the jury with all proper cautions and instructions, and we have no right to presume that any more weight was given to it than it deserved. On the whole, we think the evidence of destruction was such as the Court were bound to submit, and it having satisfied the jury it must satisfy us.

The judgment is affirmed.

---

☞ A lady received a verdict of $3,000, in New York City on the 10th inst., against a passenger railway company. She was endeavoring to cross a street at the usual intersection in slippery weather, and she fell down. Before she could arise, a passenger railway car, drawn by four horses, came along, and ran over her, inflicting serious injury. It was a case of fast driving, and at a place where caution ought to have been observed—the intersect on of a street. According to the testimony the brakesman of the car was not at his post, and the driver was unable to restrain the impetuosity of the horses. The Judge charged the jury that the plaintiff must show that she had exercised ordinary prudence in crossing. A person could not be allowed to heedlessly attempt to cross a street in the face of danger, and then recover from a rail way company in case of a failure. At the same time it must be shown that there was due exercise of caution on the part of the servants of the railway company. The jury took all the circumstances into consideration, and the verdict named was rendered.

---

☞ The Edwardsville (Ill.) Intelligencer, is rousing the people of that region to the importance of constructing a road between that town, the county seat, and Alton. The Alton Telegraph believes the work will be commenced this season, and says:

A road can be very cheaply constructed on this route, as most of the grading has already been done by the old Alton & Mount Carmel Railroad Company, which has long since been disbanded. But whether the stock will pay a good dividend or not, we leave for those better versed in financial matters than ourselves to decide, but owing to the enhanced value of the property on the route and at Edwardsville, which would result from its construction, no better investment could be made by the owners of this property than to take stock in this road.

## MESSRS. WRIGHTSON AND HOPKINS MURDERED BY INDIANS.

[Through the courtesy of Lieut. Frank Harder we have received the following official account of the murder.]

---

Tubac, A. T., February 22, 1865.

Sir:—I have the honor to enclose report of the attack made on the vedette station at Fort Buchanan, A. T., on the 17th inst.

Very respectfully your obdt. servant,

JOHN L. MERRIAM,
Capt. 1st Cal. Cav. Comman'g Post.

Capt. Ben C. Cutler,
Asst. Adjt. Gen'l.
Dept. of N. M., Santa Fé, N. M.

---

Tubac, A. T., February 18, 1865.

At 9:45 A. M. received information from Dr. Locke, of Santa Rita, that Indians had attacked the vedette station of six men at Fort Buchanan on yesterday, (one of the men from Fort Buchanan having reached Santa Rita) and that Mr. Wrightson, Superintendent of the Santa Rita Mines, Mr. Hopkins and a Mixican boy had left Santa Rita on the morning of the 17th for Fort Buchanan.

I started with a detachment of twenty-four men of my company for Fort Buchanan at 10 A. M.; arrived at Santa Rita at 11:25 A. M.; rested half an hour and arrived at Fort Buchanan at 2:40 P. M. While at Santa Rita received infurmation from my man, who had escaped, that the Indians had captured the station and probably killed three of the men; no account of Messrs. Wrightson and Hopkins; a short distance from the Fort found their bodies. They had evidently been attacked from behind, and had no opportunity of making any resistance. Found the house had been fired before the men left. The Indians had captured six horses and horse equipments, two carbines and equipments, all the subsistence, &c., except a portion of the corn, the pork, coffee, soap and candles, also all the clothing belonging to the men.

Ordered one sergeant and five men to proceed to the vedette station at San Pedro crossing, and remain there, judging that station too weak (six men) if attacked by a large force of Indians. Ordered the abandonment of the Fort Buchanan station.

There is no use trying to follow the Indians. Their tracks show that they have scattered, in small parties, in every direction. They numbered about seventy or eighty men.

February 19. Returned via Santa Rita to Tubac: found that the corporal in charge of Fort Buchanan and one man had reached there: the corporal is shot through the thigh: one private and the Mexican boy still missing.

Corporel Cuckley who was in charge makes the following statement: No signs of Indians for some time back; on the morning of the attack one man went hunting, (he is still missing) and in the afternoon two men went, as usual, tu cut hay for the horses. I was sitting at the door of the house when an Indian shot me through the thigh; this was the first knowledge we had that Indians were around; I drew my pistol and shot the Indian; at the same time private Berry shot another; the Indians now closed in large numbers (70 or 80) round the house and soon had it on fire; we kept them off until the roof began to fall in (can not tell whether any more Indians were killed or not, for the smoke) when I saw that the only chance of saving our lives was to force our way through the Indians; we broke from the house amidst a shower of arrows, and, by showing a front to them whenever they got too near, kept them off till we got to

the hills, when they gave up the chase and we made our way safely to Santa Rita. The two men cutting hay hearing the firing at the Fort hastened there but found it surrounded by Indians and on fire. They then went to Santa Rita. None of us knew anything of Mr. Wrightson being near.

JOHN L. MERRIAM,
Capt. 1st Cal Cav. Comman'g Post.

## RAILROAD FROM FREEPORT TO ALLEGHENY CITY.

As per announcement, a large meeting of prominent capitalists and parties interested in the proposed road from Allegheny City to Freeport was held last evening at the Scott House. Mr. J. C. Lewis. of Sharpsburg, presided, and Messrs. J. M. Porter and T. J. Stephenson officiated as secretaries. Mr. Lewis having, in opening, formerly stated the objects of the meeting, Mr. Coffin made a brief report of a recent meeting for consideration of this subject, at Freeport. He stated that the Freeport meeting was large, and and strongly in favor of building a road on the north side of the Allegheny river, from Allegheny City to Freeport. He had held an interview with Mr. Henry Pemberton, who assured him that Mr. Thomson, President of the Pennsylvania Central road, admitted its importance and was willing to aid in its construction. A gentleman in the meeting had in his possession a proposition from Mr. Thomas on the subject, and the object of the present meeting was to consider the same. This proposition, which was now handed to the President by Mr. Stephenson, was as follows:

"The Pennsylvania Railroad Company offer to build the road from Freeport bridge to Allegheny City, provided the money is raised by outside parties for that purpose. They offer as security to issue six per cent. (6) mortgage bonds for the actual cost of the road, and ss additional security, and to provide a sinking fund for their ultimate redemption, offer to reserve the one-eighth (⅛) of all freight that passes over the road, and from it, or to it, over the main line (Pennsylvania Central) in their bonds as cash at par, provided, however, that said one-eighth (⅛) does not exceed one hundred thousand dollars per annum. The road is estimated to cost, including the completion of the bridge at Freeport, eight hundred thousand dollars ($800.000.)"

Mr. Karns did not regard this proposition as official, or in any way binding on the Pennsylvania Railroad Company, and was in favor of sending a committee to Philadelphia to confer with Mr. Thomas on the subject. He had no hesitation in saying that the necessasy amount of money could be raised along the line of the road to build it, if the Central road would give up all control of the canal. But if the Pennsylvania Central road build it, let them do so, and those along the line would help them. He was fully convinced that it would be the best paying short road in the United States.

Mr. Coffin stated that the committee deemed the sum fixed entirely too high, more than the present prices of materials would warrant, and did not doubt that it would be lessensd on conference with Mr. Thomson. With regard to the raising of the funds, he knew that the Soda Works would take $200,000 of the stock, and believed all would be taken up at once, and the road immediately put under contract, if Mr. Thomson's proposition was accepted.

Hon. W. F. Johnson said that if it was proposed to extend it to the oil regions, the money could be raised without difficulty. It must be extended to some great commercial point. Had not the State owned the canal at the time of the location of the Allegheny Valley Railroad on the south side of the river, it would have passed up the north side where the present road is proposed to be located, which would have been *the best route by far.* He was in favor of developing the resources of the Allegheny Valley by every legitimate means, and was in favor of the proposed road, *particularly if it is to be extended to the oil regions.* If it shall be extended to the oil regions, direct communications would be had with Philadelphia. Some Pittsburgers might object to thts; but as councils were trying to kick the oil trade out of the city, it made little difference where the business went. He thought a committee should be appointed to ascertain under what charter the road was to be built. It would be only twenty-nine miles in length, and would be the shortest route to the oil regions by twenty-five miles.

Mr. Karns thought the whole discussion premature. The Central road owned the canal, and no company could build the road but that corporotion, unless it agreed to abandon the canal. Until this matter was definitely settled it was useless to discuss it.

Mr. P. Y. Hite moved that a committee of four be appointed to visit Philadelphia, confer with Mr. Thomson, and ascertain precisely what the Pennsylvania Railroad Company would do in the premises.

After some discussion as to whether this step should be taken before the stock was pledged, the motion of Mr. Hite was adopted, and Messrs. Joseph Coffin, Henry Pemberton, Francis Karnes and J. C. Lewis were appointed as said committee, with instructions to call a meeting on their return, to hear their report. The meeting then adjourned subject to the call of the committee.—*Pittsburg Chronicle, March* 28.

☞ To show the quantity of shipping which the trade to the Territories will give to the Pacific Railway from St. Louis to Kansas City, the Democrat says that the returns of the amount of freight forwarded from Kansas City, Leavenworth, Atchison, Nebraska City, St. Joseph and Omaha, was 36,074,149 pounds in 1860, and the number of wagons was nearly 7,000; and that this record for 1860 may be trebled for 1864, as last year's emigration across the plains was the largest ever known, and the prospect is that a still heavier rush will be made this season.

☞ Washington, the capital of this great Republic, has but one railway connecting ti with the thirty-six States; while London has ten railroads extending outward as means of support and military protection, Paris seven, Berlin five, Vienna four; and Richmond, the late rebel capital, has five, and these have been extended under the pressure of a defensive war, and without one tithe of the vast resources of our legitimate Government. Mr Rice, from the Committee on Military Affairs, reported to the late session of Congress on behalf of a road from the waters of the Chesapeake to Washington, and thence by Point of Rocks to Hagerstown; and also a connecting link between Cumberland and Connellsville, by which 110 miles would be saved between the capital, Pittsburg and the great West. All that was asked of Congress was a guaranty of the bonds of the company, for which the concern should be pledged.

## ANNUAL MEETING OF THE CATAWISSA RAILROAD COMPANY.

The annual meeting of the stockholders of the Catawissa Railroad Company was held last week at the office of the Company, 424 Walnut street. E. P. Borden, Esq., was chosen to preside, and M. P. Hutchison acted as Secretary. J. H. Du Puy, Esq., then submitted the annual report of the Directors, from which we condense the following facts relative to the earnings and expenses of the road for the year:

| | |
|---|---|
| Gross Earnings | $435,435 68 |
| Less Rent and due connecting Railroads | 63,362 93 |
| Earnings | $372,042 75 |
| ess Working Expenses, Maintenance and General Expenses | 233,011 65 |
| Profits of the year | $139,031 10 |

Against $128,355.65 for the previous year; equal to nearly six per cent on the preferred stock issued, after deducting interest on bonds.

The earnings for the first ten months of the year amounted to $284,549.49 against $229,-032.49 for the same period of the previous year, but by the suppression of the coal trade from the Lackawanna region during the last ten months this increase was reduced to 13.32 per cent.

The property of the Company has been very advantageously improved during the year; the sum of $220,628.46 has been expended for branch coal-road, shops, and engine-house at Catawissa, new locomotives, bridges, sidings, rolling-stock, etc.

The lessees of the Company's coal property, contrary to their expectations, owing to the difficulty of securing sufficient labor to complete their extensive works, were unable to forward coal to market during the year. This coal has been found to be of the very best quality of Lehigh.

The prospects of the coming year's business are very promising. Already the demand for cars is more than double the present supply. Negotiations are now in progress by which a large and adequate supply of cars will be obtained on equitable terms for the transaction of the joint business between the P. & E and Catawissa Railroads to and from New York.

A dividend of three per cent upon the Preferred Stock was paid in August last.

The shops of the Company at Catwissa have been completed, and will add largely to the economical working of the road.

The business, which has been steadily and healthfully increasing upon the road, is in no direct manner attributable to the war or Government patronage. Hence when peace comes, it is but reasonable to suppose the sources of revenue will be but slightly and temporarily affected, if at all.

The report closes by thanking Mr. George Webb, the Superintendent, and his assistants, for the faithful performance of their duties.

The annual report of Mr. W. L. Gilroy, the Treasurer, was then read. It contains a full statement of the financial affairs of the Company. The report of Mr. George W. Webb, the Superintendent, was next read. It gives a detailed statement of the operations of the road during 1864. Three new locomotives have been added to the rolling-stock, and several have been repaired. The passenger-cars are all in good condition, and are ample to accommodate the travel. The road has never been in better condition. The bridges, trestles, etc., have all been renewed, and accidents have been of very rare occurrence.—*Philadelphia Journal.*

## LABOR AND CAPITAL.

The contest between the iron-masters and puddlers is till going on in England, assuming such importance that we again call the attention of our readers to it. In fact, it is one of the most serious conflicts between labor and capital which has ever taken place in England or elsewhere.

In 1863, the iron-workers, to protect themselves against every contingency, established an association, which received the name of the Workman's Union. This Union has agencies in every district where there is a furnace, and the associated members number over fifteen thousand. The whole is administered by two Executive Committees, one at Gateshead, and the other at Brierly Hill. Such is the influence and power of this formidable Association, that any quarrel between an employe and his employer, in any district of England, may lead to a sudden and entire stoppage of the iron trade all over the kingdom.

It is with the view of breaking the principle of union that the masters, when the operatives of North-Staffordshire struck for higher wages, decided to "lock out" their factories. The determination of the Staffordshire iron-masters was followed by other iron-manufactures throughout England, Scotland, and Wales; furnaces stopped burning and smelting, and a general "look out" of the masters responded to the "strike" of their men. Never before has capital been so ostensibly and thoroughly pitted against labor.

From the moment it was apparent that capitalists arrayed themselves against labor, the trades of the United Kingdom, aware that the principle of union, or of protection of workmen against the encroachments of capital, was at stake, came to the rescue. At a meeting of delegates from various societies, held recently at London, the following trades were represented; engineers, carpenters, iron-founders, bricklayers, brickmakers, plasterers, tinplate-workers, masons, printers, book-binders, shoemakers, farriers, machinists, boiler-makers, coopers, boot-closers, ship-wrights, and some others whose names are not given. Two hundred delegates were present, and after condemning the "lock out" of the masters, it was moved that the "magnitude of the aggression of combined capital upon labor, evidently made not so much from the local strike in North Staffordshire as from a desire on the part of the iron masters to destroy the combinations of the men, calls for a corresponding amount of resistance on the part of the trades' societies, and that this meeting, therefore, recommends every trade society throughout the kingdom to at once vote, without waiting for any form of deputation, a sum of money from their funds; also to place a weekly levy on their members." Forty thousand pounds are required per week to sustain the "locked-out" men and their families, and it is not doubtful that a systematic supply of funds from the treasuries of all trades will be organized at once. How long this levy on the wages of English workingmen will last, is another question. Granting even that the masters, on account of their greater resources, succeed in the end, a rancorous enmity between them and their laborers will exist for a long time to come; and now that our civil war is nearly terminated, we would not be surprised to see the United States, finally, the gainers by the conflict now raging in England. Thousands of laborers will emigrate to this country, where labor receives ample and adequate reward.

The quarrel between the iron-masters and puddlers has already crippled one of the most profitable industries of England. It is calculated that since the difficulty commenced, nearly one million of bar-iron would have been manufactured. Things have assumed so serious an aspect, that apprehensions are felt in England of the universal distress which will be the consequence of a cessation of operations in the iron trade. There is between all branches of human labor an intimate connection; if the "locked-out" and "strike" last, cartman, boatman, colliers—in fact, operatives of almost every description, will have to suffer, and the sufferers will not be numbered by thousands, but by millions.

In France, a law was passed last year which recognizes to all workmen the right of uniting themselves (coalition) against capitalists, for the purpose of protecting their interests, and there is a tribunal, called the Tribunal of Prud'hommes, composed of impartial men, half of them being workmen, the other half masters, (patrons,) whose mission is to settle all differences between the two opposite interests. But such remedies, ingenious as they may be, are but palliatives in many circumstances. The organization of labor is a problem which has taxed the ability of modern economists, and as yet has received no satisfactory solution, because capital is greedy, and labor is too often exacting. To conciliate rival pretensions is not an easy task, we know; but the conciliation of labor and capital, under every circumstance and at any time, unquestionably consists in their association. If workmen were associated for a portion of the profits of those enterprises to which they would have no objection to support a reduction of their wages, when such a reduction is commanded by a stagnation of trade, having previously received their share of profits at a period of prosperity. Should they be so ill-advised as to refuse to accommodate themselves to circumstances, public sympathy would be with the masters, and ill-timed pretensions would have to succumb, in the end, under popular reprobation.

In this country, quarrels between labor and capital are less frequent than in the old world, and, above all, they can not be compared in magnitude to those which, from time to time, shake English society. With us, labor is so handsomely rewarded, and laborers in every field of industry are so scarce, that for a long time to come they can command their own prices. Labor is king, and capital the courtier, in the United States, and as long as their relation continues to be such, the great questions of political economy which agitate Europe will be to us but of secondary importance.—*Stockholder.*

## THE RESULT OF "CO-OPERATION."

A visitor who enters Halifax, England, by way of the Town Hall, will come upon Northgate, the best street in the town, where he will find a stone block of buildings, lofty, extensive and well built. This is the property of the Halifax Industrial Society, and occupied by their stores. The building has been erected and stocked at an expense of £15,000 ($75,000). The basement consists of seven shops (stores) and offices—a butcher's, a provision, a boot and shoe, a linen drapery, a grocery, a woolen drapery, and a tailor's shop. The walls are wainscoted, because paint is cleaner than paper, and the ceiling of the flour store is cased with wood, that no plaster may fall in the bins. In the rear is a commodious wharf, fitted up with cranes, galleries and landing ranges, where wagons are loading and unloading all day, delivering goods for the store, or carrying them out to its thirteen branches. A steam engine is at work on the premises, for hoisting goods, turning large chopping machines, and grinding coffee. The directors' room are as elegant as the committee-room of the Reform Club. The Secretary's offices are as convenient as a banker's. The whole building, from cellar to attic, is heated by hot-water pipes, and everything about the premises is as stately and complete as a railway or a government office. The society now numbers over five thousand members, and their families, numbering in all over twenty thousand souls, are all supplied from this establishment. The society also owns a farm of 60 acres, nearly all under cultivation, and where all its members often resort for picnics and pleasure. They also own 20 railway cars, for which they paid £1,300 ($6,500), for drawing coal, of which article they sell £10,000 ($50,000) worth annually. The society's business last year amounted to £110,000 ($550,000), yielding a profit of £12,000, or nearly $60,000. When it is remembered that all this wealth, all this progress, has been made since 1860, and during the great cotton famine, no greater proof need be asked of the feasibility of "co-operation."—*Artisan.*

---

The Manufacture of Cast-Steel in Germany, and Krupp's Vast Establishment in Essen.—The manufacture of cast-steel makes rapid progress in Germany, and at present an establishment for the manufacture thereof on a very extensive scale is erecting at Hagen, in Westphalia. The Saxon cast steel manufactory at Doehlen did very well last year, and besides writing off a large amount paid the shareholders a dividend of twelve per cent. per annum; highly favorably results have likewise been obtained by Mr. Krupp in Essen, and the mystery in which this gigantic establishment was veiled hitherto has been to a great extent disclosed by a lecture given by a Mr. Bug at the last meeting of the Lower Austrian Trade Association. The establishment, with the buildings now in the course of erection, occupies an area of about 700 acres; there are altogether 8,000 hands employed on the premises, whose aggregate fortnightly wages amount to £12,000 sterling. Seventy-five steam engines, of from 3,000 to 4,000 horse-power in the aggregate, and varying in capacity from one to 1,000 horse-power, supply the moving power, while 150 boilers consume 600 tons of coals in twenty-four hours, and evaporate 170,000 cubic feet of water. The foregoing is done by means of 35 steam hammers, varying from one to 50 tons in weight; the last is reported to be the largest in the world; it rests upon a foundation weighing 1,500 tons, and cost £90,000. The steel is prepared in crucibles, for the reception of which 240 ovens have been built. The production of cast steel in 1863 amounted to 11,156 tons, and in the first six months of 1864 to 8,035 tons. To light up the whole, 200,000 cubic feet of gas are consumed in the average during twenty-four hours. Krupp's cast steel is well known in England, but his establishment is especially famous for turning out good guns, and in our military circles it is confidently expected that he will very shortly be able to make them even of better material than hitherto, as he has quite recently acquired, for the sum of £75,000, from the Prussian Government, the Sayner furnaces, which produce the very best material for guns. —*German Cor. London Colliery Guardian.*

This establishment is represented in America by Thomas Prosser & Son, New York.

## MONETARY AND COMMERCIAL.

The continued excitement throughout the country consequent upon the death of our lamented President, the successful progress of our arms, and the singular and unexplained conduct of Gen. SHERMAN, in his negotiations with Gen. JOHNSTON, have entirely unfitted most men for business, and but little has really been done. Speculation has stood still, amazed and waiting the progress of events. The demand for money for regular business is light; currency has therefore been accumulating, and money is easy at 8@12 per cent. A large effort is being made to render a greater uniformity in the currency, by returning the notes of all the State and local banks, and adopting only the Government issues and those of the National Banks as the par standard. Kentucky and Indiana Free Bank currency is held at 2 per cent discount, and Indiana and Ohio State Banks at 1 per cent discount.

The market for Exchange is close and rates firm. The following are the quotations:

| | Buying. | Selling. |
|---|---|---|
| New York | 50@75 ℘ M. | 1-10@⅛ prem. |
| Philadelphia | 50@75 ℘ M. | 1-10@⅛ prem. |
| Boston | 50@75 ℘ M. | 1-10@⅛ prem. |
| Baltimore | 1-10 dis. | par. |
| Gold | 47@48 prem. | 50@51 prem. |
| Silver | 37@39 prem. | 41@42 prem. |
| Vouchers, city.. | 2@7 dis. | |
| Vouchers, country | 8@15 dis. | |
| Certificates | 3c dis. | par. |

The fluctuations in the gold market have been small during the last week, not having had a range of more than 5 per cent, 150 being the center.

The *Tribune* of Monday speaking of the stock market says, it "was very strong, New York central, 97½; Erie Railway, 79½@80; Michigan Southern, 66¾; Reading Railroad, 106; Cleveland and Pittsburgh, 75@75½; N. W. Co., 31½; the Proferred, 62; Fort Wayne, 97@97¼; Cumberland, 51¾@52; Hudson River, 107@107½; Rock Island, 96@96¼; Quicksilver, 64¼@64½. There is a brisk demand for Stocks of all kinds, and any attempt to buy large lots puts the market up rapidly. The supply of money exceeds anything in the recent history of Wall St, and the accumulation is not yet at an end. Government Stocks are all strong."

The following shows the condition of the New York City banks this week and last:

| | April 15. | April 22. | | |
|---|---|---|---|---|
| Loans | $206.508.095 | $204 723 195 | Dec. | $1.784.900 |
| Specie | 19.531.734 | 19.122.2?8 | Dec. | 411.447 |
| Circulation | 4 757.862 | 4 700.210 | Dec. | 57.652 |
| Deposits | 177,815,945 | 184,244,399 | Inc | 6,428.454 |
| Legal tender | 21,061.462 | 57.954,937 | Inc. | 6,893,475 |

The coal trade at the East is being seriously affected by the lessening of the demand on Government account. The capture of Rebel seaports and the consequent release of many of the blockaders has reduced the consumption, and thrown more coal on the general market. The *Pottsville Miners' Journal* of Saturday says:

"The coal trade may be said to be more dull than it has been before for a long time. There is, in fact, no demand except for the purposes of the Government, and that is abating to some extent in consequence of the fact that the squadrons of steam vessels used for blockading purposes, are being withdrawn. Manufacturers who have no stocks only take a car or two at a time, in anticipation of a still further fall in the price. The price of coal has fallen considerably, and it is confidently and reasonably anticipated that it will fall still lower. It is evident that before renewed impetus can be given to the trade, wages and rates of transportation must be reduced. Should this not take place, we predict an almost total suspension of the business.

It is a fact which must come prominently before the eyes of all interested in the trade, that prices must come down, before it can start again so as to enable the collieries to be worked. We feel confident that as soon as labor concedes its portion of the necessary reduction—a reduction that is inevitable—the prices of tolls and transportation will follow at once.

At present prepared coal can not be sold in quantity at $3 a ton, and much of the article sent to market unsold will net the producer $2 50 per ton. Much of the coal going to market, not sold to the Government, is being piled at Port Richmond, and in a short time it is anticipated that the wharves will be completely filled. This will have a tendency, of course, to keep prices lower.

To sum up, the trade is prostrated, and nothing but a reduction all round in prices can infuse into it again renewed life and vigor."

—We noticed the election of new directors in the Chicago and Alton Railroad Company last week. The board now consists of Messrs. Albert Havemeyer, Geo. A. Robbins, Geo. Talbot Olyphant, and John A. Stewart, of New-York; T. B. Blackstone, John B. Drake, John Crerar, and John V. Farwell, of Chicago; and John J. Mitchell of Alton.

The earnings of this road during the year 1864 were as follows.....$2,770,483

| | |
|---|---|
| Less Operating Expenses | $1,532,105 |
| Interest and Sinking Fund | 315,757 |
| Rents of Roads | 206,975 |
| Miscellaneous | 2,579 |
| Dividends Paid | 286,711 |
| Surplus Credit to Income | 426,356 |
| | 2,770,483 |

The earnings for the first three months of 1865 have been as follows:

| | |
|---|---|
| Passengers | $328,995 |
| Freights | 453,021 |
| Sundries | 20,628 |
| Total | $802,644 |
| Same time last year | 389,085 |
| Increase | $413,559 |

or over 106 per cent The year 1865 may be relied upon to give the following earnings:

| | |
|---|---|
| Three months actual | $802,644 |
| Nine months remaining, at 50 per cent increase over 1864 | 3,572,097 |
| Estimated earnings | $4,374,741 |
| Less expenses, 55 per cent | $2,406,085 |
| Interest, rent, &c., as in 1864 | 525,311 |
| Remaining for stock ($4,208,300) | 1,443,345 |
| | $4,374,731 |

or twenty nine per cent upon the whole stock. The road has shown since 1861 the following progressive increases in earnings, and the following profits:

| | Profits. | Annual gain in earnings. |
|---|---|---|
| 1862 | $457,793 | $126,536 |
| 1863 | 701,865 | 448,706 |
| 1864 | 1;238,378 | 1,096,777 |

Their figures, and, indeed, most of the railway statements recently published, show that Wall-st., estimates of value, as shown by the quotations at the Stock Exchange, are not always infallible. These estimates look large, but they are more likely to be increased in favor of the corporation than against it.

—The Erie Railway earned in March, 1865, $1,241,000; 1864, $1,114,508; increase, $126,492, and this in the face of nearly a whole week's idleness on the road. The quarter equals the traffic of the same time in 1864 and succeeding months will be much better.

☞ The St. Louis Dispatch makes the following summary of the railroad enterprises now in progress in that State:

It is an interesting and most significant fact that there is more railroad building going on at this moment in Missouri than in any other State in the Union. The Pacific Road is being extended to Kansas City, and will be wholly completed and in full operation by the first of August next. The North Missouri is being extended to the Iowa line; the Western Branch of the North Missouri, formerly called the Missouri Valley Road, is being built from Allen, in Randolph county, through the fertile and productive counties of Chariton, Carrol, Ray, Clay, and Platte, to Leavenworth. The Platte County Road is being extended from St. Joseph northward to the Iowa boundary. In addition to these roads now being actually built, there are in contemplation the Chillicothe & Brunswick Railroad, leading from Brunswick on the Missouri River to the Chillicothe on the Hannibal & St. Joseph Road; and the Kansas City and Cameron Railroad leading from Kansas City at the mouth of Paw River to Cameron on the Hannibal and St. Joseph Road. Outside the State, but still destined to be feeders of its railroad system, are the Kansas City & Fort Scott Road, the Leavenworth & Pawnee Road, and a road leading from Kansas City through Leavenworth up the west bank of the Missouri to Omaha. Nor must we overlook the Southwest Branch of the Pacific Road the work on which is for the time suspended but destined to be resumed and prosecuted till this important road shall be carried into the Indian country.

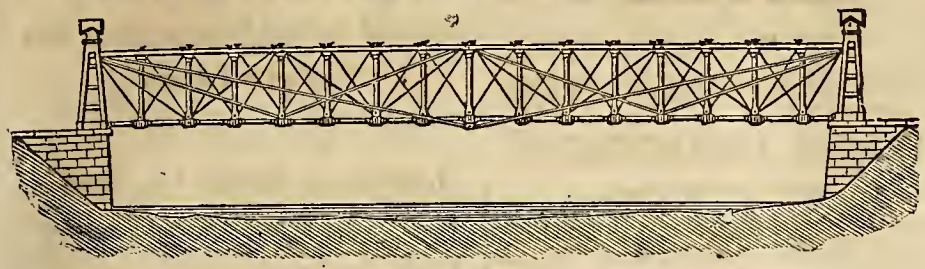
WRIGHTSON & CO.

BOOK & JOB PRINTERS,

167 Walnut St.

CINCINNATI, OHIO

## FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

jan. 5, '61. ly. Letter Box, 1302. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible] Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Et.

419 y I

---

## KNOX & SHAIN,
## Engineering and Telegraphic

INSTRUMENT MAKERS,

**PHILADELPHIA**

---

## JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

## MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

Manner, at the Shortest, and on the

**Most Reasonable Terms.**

---

Manufacturers, Importers & Dealers

—IN—

## RAILROAD, CAR,

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

**MACHINERY OF EVERY DESCRIPSION**

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

## RAILWAY SPRINGS.

**FREIGHT**

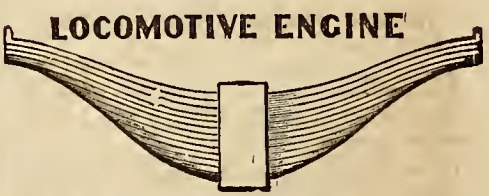




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS.

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, an one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI, O.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

**W. M. F. HEWSON,**

## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

**SPEED, SECURITY AND COMFORT.**

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY

W. P. SMITH, *Master Transportation. Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St, Louis and Cairo Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at.... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run hy me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
General Ticket Agent.

W D. GRISWOLD, General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2 MOSELEY & CO.
BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¾ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1¼ to 24 inches in diameter, and branches for same. &c.,

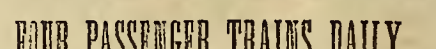
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express.

On Sundays, 10.24 P. M.

☞Through connections made for all points East and Wes

WM. TEARNE Supt

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, MAY 4, 1865.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Cincinnati Express | 6.00 A. M. | 7.30 P. M. |
| Mail | 9.00 A. M. | 8.15 A. M |
| Columbus Accommodation | 4 00 P. M. | 11.30 A. M. |
| Morrow Accommodstion | 6.20 P. M. | 8.00 A. M. |
| Night Express | 10.00 P. M. | 10.05 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky Mail | 7.00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7.00 A M. | 9.45 P. M. |
| Cin. & Chicago Air Line Express | 7.00 A. M. | 9.45 P. M. |
| Dayton Accommodation | 2.20 P. M. | 5.45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5.00 P M. | 10 20 A. M. |
| Cin & Chicago Air Line Express | 7.00 P. M. | 12.35 P. M. |
| Hamilton Accommodation | 7.00 P. M | 8.05 A. M. |
| do do | 10.00 A. M. | 6.45 A. M. |
| *Marietta & Cincinnati—* | | |
| Mail Express | 7.40 A. M. | 7 00 P. M. |
| Chillicothe Accommodation | 3.30 P. M. | 11.30 A. M. |
| *Ohio & Mississippi—* | | |
| Louisville, St. Louis and Cairo Mail | 7.00 A. M. | 11.30 P M. |
| St. Louis and Cairo Express | 6.00 P. M. | 5.00 A. M. |
| Lousville, St. Louis and Cairo Express | 7 40 P. M. | 8.20 A. M. |
| *Indianapolis & Cincinnati—* | | |
| St. Louis and Chicago Express | 6.30 A. M. | 11.00 A. M. |
| Mail | 1.00 P. M. | 5.00 P. M. |
| Night Express | 4 00 P. M. | 1,20 A. M |
| Lawrenceburg Accommodation | 4.25 P. M. | 8.35 A. M. |
| Harrison Accommodation | 9.00 A. M. | 3.00 P. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Morning Express | 9 00 A. M. | 7.30 P. M. |
| Accommodation | 4.00 P. M. | 8.05 A M. |
| *Kentucky Central,—* (City time.) | | |
| First Train | 6.00 A. M. | 10.40 A. M. |
| Second Train | 2.00 P. M. | 6 00 P. M |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.


## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.



### ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers and Proprietors.


## BANKS, DEBTS AND LITIGATION IN OHIO.

It is quite remarkable that of all kinds of business in the west, banking is the most unstable! One would think that a well regulated community must, in self-defense, have some uniform system of banking. Financial business is now done almost exclusively through banking institutions; and whether the modern plan of banking be good or evil, it is now a permanent part of the commercial system and will not be abandoned. Hence, there should be a uniform scheme which bankers and merchants could abide by. So far from it that in Ohio each ten years has witnessed a total revolution in the plan of banking, and now we are in the midst of another great banking revolution. The reason of these perpetual changes in banking is, that every political body and community thought they had something to do with banking. Congress,—the State Legislature,—the whole people in Convention, and even City Councils, have all thought themselves empowered and even wise enough to legislate upon banking. Prior to 1850, there were in Ohio, banks, known as corporate banks; each one receiving a special charter from the Legislature. By the Constitution of 1851, banking was limited to a specific amount, to be fixed by a general law of the Legislature, which was done. Under this wise system, no matter what was the demands of commerce, for banking facilities in Cincinnati or Cleveland, it could not be bad, except in the small amounts apportioned by the Legislature. In the intervals between the breaking up of the old Corporate Banks and the establishment of the State Banks, a great deal of capital went into what were called "*private banks;*" that is private bankers who received money on deposit and reloaned it. Generally they paid interest for it, and high interest. Of course, the only security in them was the integrity of their conductors. On the principle on which they were conducted, a "*dime*" was all the capital required; for no one knew whether they had any capital or not. Partly from this cause and partly from a total derangement of banking generally, this whole class of bankers were swept away by insolvency. In 1851, there were *five* chartered banks and *seven* large private establishments doing business in Cincinnati. In six years, *two* Corporate Banks and *every one of the private banks were swept away.* Of *twelve* nominal banks (some of them doing business on millions) but *three* were left! The State Banks, however, proved very safe and very efficient banking inrtitutions. From the day of their establisbment to the present time, no one had reason to complain of them. But these again are to be totally overthrown, and their places occupied by the National Banks. Whether this is wise or not, it is to be done. The "Greenbacks" or strictly National Currency, have proved a blessing to the country, and the people prefer them to any other currency; but whether this will be true of the National Bank Currency can not be yet determined. At present, however, the notes of the National Banks are the common currency in business.

The effects of *increasing the currency* by the issue of Government notes, has been very remarkable, and is thus stated by Mr. Mansfield, Commissioner of Statistics. The statement is given of State Banks, but includes the general facts relative to all banks.

### 3.—OF BANKING IN OHIO.

The amount of bank capital is stated in the above account of property, and as I gave a very full and detailed statement of the banks in my last report, (*vide* pages 29-37,) I shall confine myself to general statements of their condition now. The following is a view of the operations of the State Banks, (State, Free and Independent,) in 1863, taken from my last report. It is exclusive of the National Banks, whose operations I have, at present, no means of ascertaining:

COMPARATIVE CONDITION OF ALL BANKS IN OHIO ISSUING CIRCULATING NOTES.

| | 1855. | 1860 | 1863. |
|---|---|---|---|
| No. of Banks. | 60 | 55 | 56 |
| Capital | $5,677,749 | $5,861,361 | $5,052,940 |
| Circulation | 9,151,340 | 8,234,887 | 6 652,311 |
| Deposits | 4,849,209 | 5,210 403 | 11 405,439 |
| Discounts | 13,079 685 | 12,247,501 | 11,366,451 |
| Specie | 1,934,462 | 2,091,219 | 1,828,591 |

The general movement from 1860 to 1863 (the period of the war) is as follows:

| | |
|---|---|
| Decrease of capital | $800,424 |
| " circulation | 1,882,576 |
| " discounts | 881,050 |
| " specie | 172,628 |
| Increase of deposits | 6,195,036 |

The total diminution of *means* (that is capital, circulation and specie) is $2,863,628. The diminution of discounts being only $881,050, shows that about $2,000,000 derived from deposits were used in the discounts. But this was less than one-third the actual increase of deposits, showing that the banks were moving with great caution. Accordingly we find that in December, 1863, at the period of the last report, the banks held, including specie, seven millions ($7,000,000) in cash and eastern deposits, while their circulation and deposits were $18,000,000, thus holding 35 per cent. of the immediate liabilities in cash.

The great and striking feature of the bank movement, in the last three years, is the *increase of deposits.* These have *more than doubled,* being an actual increase of $6,195,036. When we consider the circumstances of the country, this increase is, beyond doubt, the direct consequence of the war. The war has produced *three* results in financial operations, which are strikingly obvious in all the business operations of the country: 1. An immense increase of the currency coined, by the issue of Government notes. 2. A great diminution of credits, which is proved, incontrovertibly, by the diminution of recorded debts, the diminution of imports since 1859-60, and the diminution of discounts. 3. As a direct

consequence of the last fact, a larger amount of cash on hand is required for the transaction of the business of the country.

How far this state of things continues, we shall soon determine.

In November, 1864, the account stood thus:

| | |
|---|---|
| No. of banks | 47 |
| Capital | $4,408,829 |
| Circulation | 5,116,471 |
| Deposits | 11,115,818 |
| Discounts | 9,436,994 |
| Specie | 1,180,802 |

This presents the following results, compared with those of last year, viz:

| | |
|---|---|
| Decrease of banks | 9 |
| " capital | $1,268,920 |
| " circulation | 1,535,870 |
| " deposits | 256,621 |
| " discounts | 1,939,457 |
| " specie | 647,789 |

This proves, in regard to the incorporated banks of Ohio, precisely what is quoted above from last year's report, that the *cash in hand* has very largely increased; for while there are *nine* banks less in number, and the capital, circulation and discounts have all greatly diminished, the *individual deposits* have remained nearly the same, that is, comparatively, much larger. In the meantime, many National Banks have been formed, and several of the incorporated banks become National Banks. The deposits in all classes of banks have been increased several millions, and the aggregate of deposits is probably ten millions greater than it was at the beginning of the war.

The formation of National Banks has continued to go on in Ohio, and it is not improbable that all banks (except private banks of deposit) will be organized under the National law.

2. OF PRIVATE BANKS.

What are called Private Banks are those in which individuals open a banking office, receive deposits, make loans and buy exchange. Of these banks (generally of small capital) I can, of course, get no account, except from the returns they make to the county or auditor for taxation. These give, however, a tolerably correct view of them. Generally they have very small capital and depend for their profits on managing the money of other people. Last year the aggregate of these banks was:

| | |
|---|---|
| Number of banks | 99 |
| Capital employed | $2,019,336 |

The following is a table of the returns, made by the county auditors to me, for 1864:

| | |
|---|---|
| Counties having banks | 25 |
| Number of banks | 67 |
| Capital | $2,233,131 |
| Average capital | 32,000 |

The number of private banks has diminished; but the capital increased.

In addition to the two great facts exhibited by the bank returns, that *deposits increased* and *debts diminished*; we have another of equal importance, that *litigaiton has diminished*, or more properly that *suits* for the collection of debts has *diminished*.

The following table, given by the Commissioner of Statistics, is one of great interest.

SEC. 5. SUITS AND JUDGEMENTS.

Table 18 gives an exhibit of the number of suits and judgments in the courts of this State for the year ending July 1, 1864. The numbers are as follows:

| | |
|---|---|
| Total number of suits | 12,560 |
| Total number of judgments | 8,894 |

The following table presents this class of statistics for seven years, the last being for 1863:

| | Suits. | Judgm'nts. |
|---|---|---|
| In 1857 | 29,720 | 17,500 |
| 1858 | ..... | 18,080 |
| 1859 | ..... | 17,054 |
| 1860 | 25,047 | 19,938 |
| 1861 | 22,604 | 19,222 |
| 1862 | 21,183 | 18,187 |
| 1863 | 13,346 | 10,912 |

Since 1860 both suits and judgments have diminished nearly one half; and the declension since July, 1861, amounts to 40 per cent. in suits at law, and in judgments to 45 per cent. No doubt the great commercial convulsion of 1857-8, increased the suits very largely at that time; but the largest part of the decrease we now see is due to the process constantly going on, of getting out of debt.

It will be seen above that the suits and judgments of 1864 are less than those of 1863, and less than one half those of 1860. This, at least, may be deemed a very beneficial effect of the war.

## HISTORY AND REVIEW OF STEAM SHIP LINES.

We take the following Review of Steam Ship Lines from the valuable report made to the Treasury Department, on "Foreign and Domestic Commerce."

As the tonnage accounts appear in the official records the various ocean steam-ship lines are but imperfectly disclosed. First, after the experimental trip of the Sirius, in 1838, the Great Western ran for several years —1840 and 1846—almost alone to New York. In 1842 and 1843 there were three or four arrivals of the British Queen from Antwerp; but the principal opening of the steamer trade was made by the Cunard line, established in 1840 and 1841, from Liverpool *via* Halifax, to Boston. There were several of these vessels, the Columbia, the Acadia, the Caledonia, and Britannia, the first four of the line. The Columbia was lost in 1843, and was succeeded by the Hibernia and the Cambria, [in the tonnage of arrivals at Boston the capacity of these vessels is given at a much lower figure than when in 1848, they were reported at New York; the Cambria being at Boston 760 tons, and at New York 1,334 tons; the Hibernia 791 and 1,324 tons; the Acadia 612 and 1,300 tons; the Britannia 609 and 1,161 tons; the Caledonia 615 and 1,116 tons. No sufficient reason appears for the discrepancy; but as it was admitted in the original calculations of tonnage, the materials for this statement must now be made up in the same manner. This decrepancy in the tonnage of the same steamships recorded at Boston and New York continues to the close of the employment of the first line of ships in 1862,] to which were added, on the extension of the line to New York, in 1848, the Niagara, Europe, Canada, America, and the Trent and Severn, of the West India line, occasionally came to New York. The Cunard line was the pioneer as a commercial venture strictly. It always carried a larger share of merchandise than other British lines, and larger also than the American line afterwards established to British ports. A French line from Havre appears in the arrivals at New York in 1847, three or four steamers of about 600 tons each, but they disappear in 1848. [Entered as the Union, 704 tons; the Philadelphia, 593 tons; the New York, 586 tons; and the Missouri, 599 tons.]

In 1848, simultaneously with the extension of the Cunard line to New York, and its enlargement to a total of 55,000 tons arriving in the fiscal year 1848-'49, there was an American line to Bremen established. The Washington and Herrmann, and a large steamer, the United States, made several trips to and from Havre. The Isthmus lines were begun nearly at the same time, expanding rapidly in 1850 and 1851, and, as they touched at Vera Cruz and Havana frequently, their tonnage appears as foreign arrivals, entering from Mexico and Cuba, though conducting little actual foreign commerce. In 1850 the first arrivals of the Collins line were reported at New York—the Atlantic, Pacific, Arctic and Baltic. The tonnage by these ships rose to 75,000 tons annually in 1853 and 1854, but the line was abruptly discontinued in 1857.

An interruption of the Cunard line to New York occurred in 1855, amounting to an absolute discontinuance for the entire year, but it was fully resumed in 1856. The tabular statement preceding being for fiscal years does not show the fact of discontinuance during the calendar year 1855. The line ran to Boston, however, as usual.

In 1856 a French line from Havre was started to New York, composed of the Barcelone, the Lyonnaise, the Alma, and Cadiz, but they made a few trips only. Several British steamers—the Jason, Etna, Alps, &c.—made a few trips also from Havre to New York in 1856 and 1857, but they were not afterwards continued.

From Breman the Hansa, a Breman vessel, in 1856 and 1857, made a few trips to New York, and the Jason and Argo, British, after the withdrawal of the Hermann and Washington, American. A line of Belgian steamers was also started in 1856—the Leopold, the Belgique and Constitution; but soon withdrew. The Hamburg steamers Bornesia and Hammonia, and the Breman line, before referred to, continued in successful operation, between

the North German ports and New York, from their beginning in 1856. In 1859 and subsequent years they received the addition of two or three heavy steamers—the Teutonia, Bavaria, and Saxonia, from Hamburg, and the Bremen and New York, from Bremen. Together the amount of this tonnage from Hamburg and Bremen rose rapidly from 1858 forward, amounting to 109,892 tons in the calendar year 1863. The success of the line has been so decided as to lead to a large diversion of the trade of continental Europe through the ports of Bremen and Hamburg, ranking them next to England in the general amount of trade with the United States.

The trade with France, largely carried by the American line of steamers to Havre from 1857 to the close of 1861, is now received through a British-built line, just its first passages in June, 1864, and a second line of new foreign steamers is also started between Liverpool and New York.

The effect of the establishment of the Bremen and Hamburg lines of foreign steamers on the trade of the United States with those countries is so striking as to require notice here. The following is a comparison, beginning with 1855, of the proportion of American and foreign vessels engaged in the trade of the United States with those ports:

*Vessels and tonnage entered the ports of the United States from Hamburg and Bremen.*

| | Am. Vessels. No. | Tons. | For. Vessels No. | Tons. |
|---|---|---|---|---|
| Fiscal Year 1854—'55 | 50 | 39,525 | 237 | 159,807 |
| 1855—'56 | 38 | 37 293 | 214 | 121.498 |
| 1856—'57 | 36 | 37.411 | 264 | 171 844 |
| 1856—'58 | 30 | 91 300 | 235 | 169,069 |
| 1858—'59 | 9 | 11 2 3 | 218 | 186,599 |
| 1859—'60 | 5 | 4,033 | 193 | 170 292 |
| 1860—'61 | 12 | 8,298 | 181 | 161,005 |
| 1861—'62 | 10 | 7.361 | 196 | 189.604 |
| 1862—'63 | 9 | 9,018 | 183 | 179,595 |

The conduct of this trade has, therefore, almost wholly passed to other than United States vessels. The value of the trade has also increased beyond all proportion to the tonnage. In 1859-'60 the imports from the two ports were $18,498,607, and the exports $18,378,703—a total trade of $36,877,310, a very little, indeed, of which was carried by American vessels.

PRESENT CONDITION OF FOREIGN STEAM LINES

(JUNE, 1864.)

The present condition of the foreign steam lines to the United States is shown in the following table, first embodied in a memorial to Congress by the Chamber of Commerce of New York:

*Foreign steam lines to the United States, January*, 1864.

| Line and Route. | Name of Steamer. | Tonnage of each Steamer. |
|---|---|---|
| Cunard line...Liverpool to New York, and Liverpool to Boston. | Scotia | 4,133 |
| | Persia | 3,687 |
| | Australasian | 2.668 |
| | China | 2,522 |
| | Arabia | 2,285 |
| | Africa | 2 088 |
| | Asia | 2,051 |
| | Europe | 1,751 |
| | America | 2,139 |
| | Niagara | 1,824 |
| | Canada | 1,831 |
| | Tons | 26,870 |
| Screw line | Kedar | 1,628 |
| | Hecla | 1,684 |
| | Olympia | 1,666 |
| | Sciota | 1,704 |
| | Tons | 6,682 |
| Dale line...Liverpool to New York. | City of London | 2,560 |
| | City of New York | 2,560 |
| | City of Baltimore | 2,367 |
| | City of Washington | 2,380 |
| | City of Manchester | 2,109 |
| | City of Cork | 1,545 |
| | City of Limerick | 1,540 |
| | Etna | 2,215 |
| | Edinburgh | 2,197 |
| | Kangaroo | 1,874 |
| | Bosphorus Branch | 448 |
| | Glasgow | 1,962 |
| | Tons | 23,757 |
| London and New York Steamship Company. | Bellona | 1,703 |
| | Celia | 1,683 |
| | Tons | 3,386 |
| Anchor line | Unica | |
| | Avoca | |
| | Una | |
| | Britannia | 1 274 |
| | Caledonia | 1,265 |
| | United Kingdom | 1,155 |
| | Tons | 3,694 |
| Montreal ocean steamship line | St. George | 1,426 |
| | St. Andrew | 1,293 |
| | St. Patrick | |
| | Tons | 2,819 |
| Galway line | Adriatic | 4,000 |
| | Columbia | 6,000 |
| | Tons | 6,000 |
| National Steam Navigation Company | Louisiana | 2,271 |
| | Virginia | 2,747 |
| | Carolina | 2,410 |
| | Tons | 7,428 |
| Hamburg American Packet Company. | Saxonia | 2,500 |
| | Hamburgonia | 2,400 |
| | Teutonia | 2,400 |
| | Borussia | 2,400 |
| | Germania | 2,000 |
| | Tons | 11,700 |
| North German Lloyds steamship line | America | 2,509 |
| | New York | 2,366 |
| | Hansa | 2,882 |
| | Bremen | 2,398 |
| | Tons | 19,155 |
| Jamaica, Hayti, Nassau and Havana | Saladin | 518 |
| | Corsico | 1,042 |
| | Tons | 1,560 |
| | Aggregate tonnage. | 104,051 |

The Adriatic, here named as one of the Galway line, and now owned abroad, was originally built for the Collins line, and is the only steamer of American build which crosses the ocean. To the list above given, from January to June, 1863, the following have been added:

*The General Transatlantic Company's line between New York and Havre.*

| | |
|---|---|
| Washington, 3,204 tons | 900 horse power. |
| Lafayette, 3,204 tons | 900 horse power. |
| Eugenie (afloat) | 900 horse power. |
| France (building) | 900 horse power. |
| Napoleon III, (building) | 1,100 horse power. |

*The National Steam Navigation Company's line, New York to Liverpool.*

| | |
|---|---|
| Virginia | 2,876 tons. |
| Pennsylvania | 2 972 tons. |
| Louisiana | 2,166 tons. |
| Westminister | |
| Queen | 3,612 tons, (building.) |
| Erin | 3 215 tons, (building.) |
| Ontario | 3,212 tons, (building.) |
| Helvetia | 3,209 tons, (building.) |

Various propositions for the establishmant of new American steam lines to foreign countries have been made during the last year, and it bas been claimed that the aid of the government should be accorded to any lines which should be opened, at least to the extent of the aid regularly accorded by the British government in like cases. The circumstances surrounding any such enterprises at the present time are decidedly adverse, unless aid of some decided character is afforded. The national and semi official character attached to European steamer lines by the governments supporting them undoubtedly goes far toward securing them precedence in passenger carriage, in important and valuable freights, and in every element of security, with the advantages it brings—the consideration of chief importance now in distant voyages. A system of official recognition similar to that which has so long characterized the royal mail steamer lines of Great Britain is urgently needed for the United States.

## GIFFARD'S INJECTOR ON A RAILWAY IN FRANCE.

At a meeting of the Institution of British Civil Engineers, J. R. McClean, Esq, President, in the chair, a paper on "Giffard's Injector" was read by Mr. John England, M. Inst. C. E. Before entering into a description of this instrument, the author alluded to what had been previously done for raising or forcing water by means of a jet of steam, and apparatus without moving parts; including the plans of Solomon de Caus, of David Ramseye, of the Marquis of Worcester, of Savery, in 1698, and of the Marquis de Manoury d'Ectot, in 1818. It was observed that when Manoury, by the same means as Savery, had raised water to the hight due to atmospheric pressure, instead of, like Savery, carrying it further by means of a steam-jet, he employed a water-jet on the principle of Montgolfier's water ram, for raising it to the required hight; so that Savery's method, though more than a century older than Manoury's, approached nearer to the apparatus under consideration.

In describing the mechanism of the Injector, the author divided the instrument into two distinct parts, by an imaginary plane at right angles to the axis, through the space between the two nozzles, through one of which the jet of mixed steam and water was forced by the pressure from the boiler, while the other received this jet of mixed steam and water for transmission to the boiler. The instrument consisted of a cylinder, having fixed in it, below the level of the inlet of the feed-water, a conical piece, called the "lance." Sliding in the upper part of this cylinder was a perforated tube, with a tapering termination called the tuyere, and this tube was worked by a handle and screw, by which the area of the annular passage for the feed-water, formed by the conical piece in the cylinder and the tapering termination of the tube, could be varied at pleasure, according to the temperature of the feed-water and the pressure in the boiler, as the higher the pressure, the greater the opening required. Within the tube there was a solid plug, called the needle, worked by another handle and screw, and likewise having a tapering end, by which the area of the steam-passage could be increased or diminished, by the less or greater extent of the insertion of the needle in the tuyere. When adjusted for work, the action of the steam-jet from the tuyere was such that a column of commingled water and steam, called the "sheaf," was projected in the direction of the axis of the instrument, through the terminus of the lance. In the axis of the lance, and at a short distance from its end, was fixed the second part of the apparatus, consisting

simply of a divergent tube, whose properties had long been known, but of the application of which no one appeared to have thought till the inventor of this instrument availed himself of it, with so much ingenuity and success. Leading directly to the boiler, this tube was furnished with a valve, which when the work was stopped, closed with the back pressure. Two modifications of the first part of the apparatus were then noticed. In one, which had been supplied for a stationary boiler, the tuyere, instead of sliding with the inner tube, was fixed to the cylinder, so that it became the terminus of the steam-pipe from the boiler; and the inner tube, instead of carrying the needle, contained the lance and the divergent tube, and was now, when moved toward the fixed tuyere, the water-adjustment, the packing between the water and the steam-chambers, which with the moving tuyere were needed, being dispensed with. In the order, which was a modification of the latter, by M. Turck, the water-chamber was isolated by the inner tube; and the inner tube, instead of carrying the lance and the divergent tube, moved independently of them, as well as of the needle; thus not only dispensing with the packing between the water and steam chambers, but getting rid of packing altogether. The form of the lance had been determined principally by experiment. The minimum section of the divergent tube was the unit by which the other parts of the instrument were measured and proportioned, and determined its force of injection. Experiments had given 1 3 for the orifice of the lance, or nearly that of the tuyere; but at very high pressure this must he reduced to unity; the tuyere then being 1-2. Respecting the physical properties of the sheaf, it was remarked that the indraught of the feed water was accounted for, in the same manner as the working of water-bellows, or the blast in locomotive-chimneys, by the abstraction of *vis viva* due to an instantaneous change of velocity. The feed water mixing with the motor steam, which is partially condensed, resulted in a sheaf made up of minute spheres, which, if received into a glass vessel, disappeared with the cessation of motion. Experiments proved that the velocity of the sheaf, so composed of spherical particles, was greatly in excess of that due to the quiescent force of the water in the boiler which it had to overcome. When leaving the boiler at a temperature due to its pressure, the steam escaped from the tuyere, and penetrated a liquid whose temperature was much less, a sudden change took place—an instantaneous conversion of heat into work. It was easy to express, algebraically, the usual effect resulting from this work; it was the force of projection with which the sheaf in each time-unit was moving; it was the dynamic quantity which would he turned into useful work. This quantity had, for expression, the incorporation of the mass with one-half the square of its velocity. With this force of projection, the sheaf, after leaving the lance, and traversing the space in communication with the atmosphere, encountered the quiescent force of the water in the boiler, the moment it passed the minimum section of the divergent tube, the slight taper of which permitted, with minimum friction, the expansion of the sheaf around its axis As this result of the back pressure from the boiler took place, the velocity of each element being converted into pressure, the sum of these effects represented the total energy of the sheaf. In other words, its pressure, in every successive cross section of the divergent tube, became greater, till at the end it attained the maximum and entered the boiler. From the moment onward, motion began and the work of injection took place, then, from the contraction of the sheaf in the "lance," to its expansion in the divergent tube, a simple phenomenon of liquid fluid, as in a conduit, was produced. The author next alluded in detail to a table, showing the conditions of working the injector, for which he was indebted to M. Turck, of the Western Railway of France, and gave another table, exhibiting the quantity of water injected per square millimetre of the minimum section of the divergent tube, in gallons per minute, by instruments of four companies, according to experiments made by the "Compagnie de l'Oust." The mode of working with the injector on the Western Railway of France was, according to M. Turck, as follows: Steam was maintained to the indicated pressure of nine and a half atmospheres; going down inclines the boiler was filled to the maximum water-level, and it was supplied during stoppages at stations, care being taken to arrive with low water. In those stations where the engine had to remain for some hours before starting, the steam was at two, or at most three atmospheres; and as soon as the engine was shunted, the injectors were set to work to fill the boiler, using up the steam—which would, with pumps, and without a donkey engine, be wasted to 0. There were engine men who, when the steam was blown off, which seldom happened, were enabled to heat the water in the tender, and who, by feeding on the inclines and at stations, saved, as compared with the some boilers fed with pumps, but without a donkey-engine, a kilogramme and a half of food per kilometre. The test of the injector appeared to be, its comparison with an apparatus, such as Mr. Beattie's, which, abstracting its first cost and that of maintenance, by utilizing the heat of the exhaust steam, and by delivering the water at the boiling point, was asserted to effect a saving of fuel to the extent of thirteen and a half per cent, as compared with any process other than that of the injector, delivering feeding water at the temperature of fifty degrees. The apparatus was described, but it was contended that this method did not effect a saving of more than nine per cent. To set against this there was the excess of first cost and maintenance, the greater liability to accidents, and the increase of back pressure. These were deemed to be so considerable that most railway companies, both at home and abroad, now adopted the injector for all new engines. It was observed that the application of this instrument as an elevator, opened a wide field for its employment; and in conclusion a list was given of all that had been published in France and in this country relative to the injector, which, with the exception of the information furnished by M Turck, had formed the data on which the paper had been prepared.—*London Colliery Guardian.*

---

Pittsburgh Iron Manufactories.—The Pittsburgh *Commercial*, in correcting a statement of the Cleveland *Herald*, that most of the iron manufactories of Pittsburgh had suspended operations, says there has been but a temporary stoppage of a small number of mills; the others have not stopped, nor do they contemplate stopping. One or two mills have revised their scale of wages, but we believe the matter has been accommodated. Whatever stoppage there has been, was for temporary causes; but we believe it is entirely true that no mill is at the present time running at a profit.

## ENGLISH RAILWAYS

We are left in the dark concerning the future of English railways. We said recently that the most part of those railways are liable to pass into the hands of the government on January next In the year 1844, an act was passed by Parliament, which enacted that the government may purchase at the end of twenty years, from January 1st, 1845, all railroads constructed after 1844; and it was further enacted that the price, in case of purchase by the government, should be determined upon a twenty-five years' purchase of the net profits of the roads, calculated upon an average of the three years preceding. We have also said that the British Government, before coming to a determination respecting the right they have reserved, had a committee appointed, whose mission it is to propose the best means of putting an end to the mismanagement and abuses of railroad companies. Since the committee has been appointed, we have heard nothing of its labors. We suppose that the investigation is not yet ended; but we shall soon learn the resolution, which will be submitted to the English Government.

The partisans of the railroad companies contend, with an apparent show of reason, that the abuses complained of by the public would not cease were the management of the roads intrusted to government officers. On the contrary, it is confidently assumed that corruption and inefficiency would mark the period of government management; and it is added that, if one of the wealthiest interests of England should pass from the hands of private individuals into those of public functionaries, an era of danger for English franchises would follow, in consequence of the immense patronage the purchase of the roads would confer on the government.

But it is answered, with not less apparent reason, by the opponents of railroad companies, that unless the management of the road be taken entirely ont of the hands of private enteprises, the security of the traveling public will continue to be in jeopardy, companies having in view but the distribution of fat dividends, to enable the managers to operate for their exclusive benefit at the stock-exchange. The comfort and security of travelers are of no consideration whatever; and all efforts of the government to remedy increasing evils having failed, there is no other resource left than to avail themselves of the purchasing clause to which we have alluded. As for the danger public liberties would be exposed to in consequence of an extensive patronage, such an apprehension is laughed at in an epoch of enlightenment and progress such as the one we live in. But whether the danger is imaginary or real, no choice is left to the government; public safety commands that they take absolute management of the roads.

We have previously stated our conviction that a compromise will intervene between the opposite pretentions. The English Government will not carry out the provisions of the act of 1844. No minister would dare to ask Parliament to increase the public debt by the purchase of almost all railroads now in operation. But that measures will be suggested by the committee appointed, in view of strengthening the control of the government, and its supervision over the roads, also of extending transportation facilities, and protecting the English public against insufferable abuses, and that those measures will be adopted by Parliament, we do not entertain the slightest doubt. Still, the question will re-

main, how to force reluctant companies to manage railroads, which are public ways of communication in these days, in a manner satisfactory to the public? The only way of redressing persistent grievances is certainly to remove the management of the roads from their hands. But few governments are prepared to assume the responsibility of managing themselves, and the difficulty is obviously of a perplexing nature.

The same question, we predict, when our civil troubles are over, will demand a solution in this country. Our railroads are no better managed than those of England; facilities of communication are sadly wanting; there is no regard for public comfort and public safety; and that something must be done soon in the matter, nobody will deny. In the mean time, the proceedings of the English Government toward railroad companies are worthy of attention.—*Stockholder.*

## RAILWAYS IN GERMANY.

The great event of last week was the annual general meeting of the Leipzig and Dresden Railway Company, which was held at Leipzig on the 23 inst., and attended by an unusually large number of shareholders. The report showed that during the year 1864 the total receipts amounted to $2,105,850, and the expenditure to $887,724. The total number of passengers conveyed over the line was 1,229,351, of whom 15,610 in the first-class carriages, 247,507 second-class, and 966,234 third-class. The surplus permitted the payment of a dividend for the year of 16 per cent in addition to the interest of 4 per cent. already paid, making together the handsome sum of 20 per cent. The rolling stock of the company was stated to consist of 45 locomotives, 45 tenders, 130 passenger carriages with 5,038 seats, and 883 goods vans, capable of conveying 114,770 centners of merchandise.

But the principal feature of the meeting was to decide the important question and confirm or reject the treaty entered into by the board of directors with the Government of the Kingdom of Saxony relative to a new, shorter and more direct line between Deipzig and Dresden, the concession for which has already been granted, subject to the approval and confirmation of the general meeting. By reference to the map it will be seen that the present railway forms the arc of a circle, the most northerly point of which is Roederau, where it joins the branch line to Juterhogk and Berlin, the total length of the metals being 15¼ German, or about 70 English miles. The new line will make a curve to the south, passing to Meissen, where a standing bridge will be thrown over the Elbe to open a communication with the section at the present line from Coswig to Dresden, and the total length will be 12-85 German miles, being thus 2-65 German, or about 12 miles shorter. The capital required for the new undertaking is estimated at eight millions and a half of dollars, with a double line of rails, and seven millions and a half with only a single one, both including the new railway bridges over the Elbe. To raise this capital it is proposed to issue 25,000 new shares at $100 each, making $2,500,000, and to make a preference loan for the rest at not more than 4 per cent. per annum interest. The new shares are to be offered at par to the holders of the present 50,000 shares, at the rate of one new share for every two old ones, and if not all taken in this manner, the rest to be sold in the open market for account of the company. After some explanations required by different shareholders, and given by the chairman of the board of directors, Mr. Harkort, the meeting unanimously confirmed the convention with the Government, empowering the board to take the needful steps for its due execution. The whole of the new line, including the bridges over the Elbe, must be completed and open for traffic in the course of the year 1867.

The negotiations that have been going on for some time past between the government of Hanover and some English capitalists for the construction of two railways, namely: from Elze to Hameln, and from Karlshaven to Lohne (a station on the Cologne and Minden line,) have led to satisfactory results, and the contracts will be signed in a few days. The English company has proved to the satisfaction of the Government that they are in possession of the requisite funds for the execution of the works, and undertake to open both lines for public traffic in a year and quarter from the date of the contract. The surveys and tracings are completed and the lines marked out.

Several of the German railway companies have issued their annual report, and declared their dividends for 1864. Thus the Berlin and Hamburg give a dividend of 10 per cent; the Mecklenburg, $7 per share, or 3½ per cent.; the Neisse and Brieg, 4½ per cent.; the Chemnitz and Wurshnitz, 9⅛ per cent.; the Upper Silesian, 10 per cent.; the Aiz-la-Chapalle and Dusseldorf, 4⅛ per cent.; and the Ruhort and Krefeld, 6⅜ per cent.—*Local Correspondence London Railway News.*

## TUNNEL OPERATIONS AT MONT CENIS.

The London *Review* has an interesting account of the principle on which Mont Canis is being pierced for the Franco-Italien Railway:

The motive-force, a new air-compresser, is curious from its very simplicity. Imagine a large syphon of cast-steel pipe, with equal legs, closed at each foot; and suppose this inverted, and considerably flattened at the bow. Along this flat base of the double tube moves a piston, worked by a water-wheel, needing of course only a slight fall. The syphon being more than half full of water, as soon as the piston moves to the right, the water rises in the right leg, squeezes the air, and at last forces it out through a valve into a receptacle. As it retreats and moves to the left, the same process goes on on that side, and when the air has been compressed and driven out, atmospheric air rushes in through other valves at the top to fill up the void so made. By this simple process, air is compressed to one-sixth of its ordinary volume. The power of the water wheel is, of course, less than that of a hydraulic pump, but the stroke is more rapid; so that the amount of the work done is, it appears, quite as great. The quantity of compressed air required for working the pistons and purifying the tunnel after the explosions is immense—a million of cubic litres per day. Hence there are multitudes of syphons constantly at work. The factory is described as looking like a gaunt forest of fossil trees, into such strange branching shapes are the iron tubes twisted. One great advantage in such a number of generators and receptacles is, that an accident does not stop the works, for each supply-pipe can be cut off from its neighbors. The tunnel inside is full thirteen feet wide, and high in proportion, lighted with gas, (the clear burning of which is an admirable test of the purity of the air,) and provided with a trench along its whole course, which, besides carrying off the drainage and holding the gas-pipes, would answer in the last resort as a means of escape for the workmen in case there should be a large falling in of rock. We must not suppose, however, that all this work is done by the compressed air. As soon as the chisels, some ninety in number on the advanced front, have made holes about a yard deep, which they do in about six hours, the machine is stopped, the holes are filled with fuses, as in ordinary mining works, and the workmen hide behind the "battering-train" till the explosion is over. There is very little to fear from falling rocks; the rock is so hard, and the holes so numerous, (the surface attacked being about seven square yards,) that the pieces loosened are small. The danger is from the gases generated by the gunpowder. To make the tunnel habitable, the moment the blasting is over, the supply-pipes are all turned full on, and the compressed air is allowed to pour out until the fumes of gunpowder are driven far to the rear. M Menos's testimony is, that the air up at the far end of the tunnel is much purer than it is about the middle. Here the vapors lodge, and the vitilated air has to be pumped out by another of M. Sommeiller's contrivances. Pulmonary complaints, indeed, are not uncommon among the workmen; but these are probably more due to the sharp mountain-air and to the sudden changes—from warm tunnel to cold hill-side—than to any excess of carbonic acid. Where gas can burn freely, man can live safely. The "perforator" consists of a number of chisels fixed to pistons, which are worked horizontally by the compressed air. The difficulty was not to get the mere stroke, but to give a triple motion, something like that which the hand communicates to a tool. The chisel should deliver a blow; it should turn round a little, (all cutting, we know, is really sawing or rasping;) it should go deeper at every stroke. The ordinary pistons provide for the first; the third is easily managed by means of a strong spring behind each chisel; the second is contrived by means of a cogged wheel, one tooth of which is liberated at every stroke by a ratchet working in a cylinder of its own. When the perforator has passed on, a little army of workmen attacks the sides and roof of the aperture which it has made. Far in the rear of what we call the head of the battering-train, groups of them are seen slung in cages overhead and down the walls. Each group gathers on a flooring its own heap of debris; and every now and then up comes a wagon along the tram, stops under a trap-door, and is soon filled with what will form for centuries a supply of road-metal for all the neighborhood. And thus the great tunnel is being made—slowly but surely—at the rate of about three yards in the twenty four hours; half a yard more at the Modane (Savoy) end then at the other. Six years more will, they say, finish it; and we presume that about one-third of it is already done, seeing that they have been four years at work at one end and two at the other. The rock has hitherto been metamorphic; but the centre of the mountain is a kind of quartz, so hard that they expect it will fare ill with their chisels when they come to bite into it.

Allegheny and Freeport Railway.—The prospects of the new road from Allegheny City to Freeport, along the bed of the Pennsylvania canal, are highly flattering. The distance is short—less than thirty miles—and by following the canal but little grading will be required.

## STEAM CARS VERSUS TRAINS.

Sixteen years ago Mr. Brydges Adams, a theorist and practician, got into use a few steam carriages on railways. One called the "Enfield" had an upright boiler, and was capable of carrying eighty passengers, and drawing two or three common carriages. The boiler made steam well; and the carriage, with its train, made as good time as ordinary locomotives; but, the water being bad, the boiler got incrusted on the crown-sheets, and did not last long. Mr. Adams told a friend of ours that he could remedy this difficulty by suspending a fire-brick perforated shield under the crown sheet, to protect it from intense heat, and this would also aid in burning smoke, as the fire-bricks did in Beattie's engines. But the boiler was condemned; and the next carriage, the "Fairfield," had a locomotive boiler, in fact a locomotive was combined with the frame of the carriage. The working of these carriages was said to be economical, but the business of the railway to which they belonged was too great for single carriages, and light locomotives with trains were adopted.

Four years ago the Erie Railway built a steam-car with 8x12 cylinders and 42 inch wheels. It drew a common car with ease, and two cars with occasional difficulty in starting. The lap of the valve was shortened to avoid this difficulty. The motion of this car was said to be jerking and uncomfortable to passengers. It was not suited to the ordinary work on this end of the line; and was sent to the eastern end, where it continued to work. Some locomotive builders who rode in this car did not like the plan of it; it had too much power for a single car; and they thought that if more than one car were used it would be better to have a locomotive. This car is on the plan of Mr. Wm. P. Parrott, of Boston, who built several for the branches of the Worcester railway, which worked well and economically, being adapted to the amount of traffic.

The result of these steam-cars, and some others, have not satisfied railway managers that single cars can be substituted for trains. As a general conclusion this is correct; but as a universal conclusion it is incorrect.

To stop and start a train on the Hudson River railway was estimated before the war to cost $1 25, or about one cent per ton. A considerable part of this cost was due to the wear of brakes and wheels, and damage to the rails by sliding the wheels. If a steam car is stopped by back-pressure, without slipping its wheels, the cost will be considerably less than 1 cent per ton for each stop and start. The weight on the drivers being great in proportion to the whole weight in motion, there will be no sliding, whereas the brakes cause more or less sliding of car wheels, and locomotives slip more or less in starting trains. In view of these facts, it may be considered that the cost of stopping and starting a steam car for fifty passengers, which will weigh an eighth as much as a train, will be much less than an eighth, probably less than a twelfth, as much as a common passenger train on this railway; or $1 15 might be saved.

But this is only what the company saves. And we should add the loss of time of the passengers, which, on the lower part of this railway, probably averages three hundred As the average speed when running is 38 miles an hour, and the average including stops is 30, there must be a considerable time lost; how much we do not know, but probably not less than three minutes. And at the lowest estimate of the value of time, there must be several dollars lost.

In addition to all this there is something not gained, which the company and others might gain. There are beautiful sites for building along the line, so far from the stations as to be useless for that purpose: the proprietors have no present income from them; and the company has not the profit of carrying those who would occupy them, if they could easily get to the stations.

In view of these considerations it is proposed to build inter-station steam carriages of such moderate weight that they may run on four wheels; and of such power that they can keep clear of trains, and stop and start quickly at little cost. These carriages would stop along the line to pick up residents, and carry them to the stations; and with such means to feed, the stations need not be nearer than ten miles apart. At a sufficient time before a train is to arrive, a carriage would start from a station, and pick up all the passengers on the line to the next station, and be shifted off the track before the arrival of the train. Thus the trains would be saved half the stops, and the passengers would save half the lost time, and the company would have more business, and the property would have more value

But there is no car on the rails that is entirely satisfactory; in fact, none that can run fast enough. And we know of none that has an easy motion. All that we have ridden in have too much of the uncomfortable motion which is noticeable in street railcars, even at a slow pace, and is exhibited in full force in locomotives. Any steam car that we know would be intolerable at fifty miles per hour; and this speed must be often attained by a carriage for this service.

## ENGLISH ORDNANCE.

The London *Engineer* proposes a general reconstruction of the inventions which have been adopted by the British Government, and urged upon the attention of the engineering public, since the first French iron clad frigate initiated the revolution in naval warfare. It discusses the Armstrong and Blakely guns, and the materials that have been tried; and inclines to the conclusion that cast-iron guns, cooled from within, will prove better than any others. It considers that wrought-iron boops, as used by Blakely and Parrott, will become loose and of no effect; and that steel is too brittle; and that the spiral system of Armstrong is about becoming unfashionable even in the Government factory, and is of no use. Finally, it proposes to import a few American guns of large caliber, and try them at Shoeburyness; and if they show that they are better than the English cast-iron guns, then to try Canadian iron with a view to obtain a strength equal to that used in American guns.

With due respect to practicians, we suggest that the costly, elaborate, and really important experiments made by the English Government, and many individuals, indicate that the next step should be in the working of guns. Mr. Scott Russell has shown that gun-cotton can be worked more or less expansively, like steam, so as to burst rocks and guns, however thick they may be, or to work pistons in thin cylinders without straining them. But gunpowder, he thinks, is not so manageable; if this be so, then use cotton; but we doubt the doctrine that powder is uncontrollable; and deem it a mere superstition, that should be tested by thinking men before more money is spent on guns.

We have had clumsy attempts to work powder less expansively, and more like steam at full stroke, by lump and cake powder. The guns were relieved; but the balls were not thrown with due force; and the powder was fired away like shot, without burning inside the guns, and was sometimes picked up unburned.

It is held that, when the ball is not rammed home, the powder suddenly and wholly ignites and explodes, and generates a force that no gun can bear. We find no authentic and indubitable evidence of this: and if we do find such evidence, we should receive it with the highest satisfaction, as proving that powder can be wholly turned into gas before the ball gets out of the gun.

But, assuming that powder can be wholly fired and exploded in the time supposed by those who hold that guns are bursted when there is too much room for the powder, we have to inquire '*how much* space is required for this mischief, and *how much more* space is required to reduce the pressure by unresisted expansion, so that it shall not strain the gun. Let us try; and not spend millions without trial, because the multitude of old doctrinaires tell us that everybody knows that the gun will burst if the charge is not rammed home. Let it burst: let a dozen guns, or as many as the old doctrinaires like to fire in their way, burst tremendously and curiously, and the pieces be put in museums: and then let wide awake experimenters try as many more, in their way. We believe it will be found that when the charge lies loosely in a space five times greater than it can fill, the gun will not be strained; and we should be glad to learn that under this condition a charge of fine powder would be wholly burned before the ball left the gun.

If in this way the pressure can be let down, as in the case of gun-cotton, then we may make guns of two instead of three calibers diameter at the reinforce, and make them longer to allow room for expansion, and have lighter guns, and avoid bursting. If it requires more powder to work in this way, as it probably may, that is not so great an evil as we now suffer from the bursting of guns in ships, and the weight of field guns.

In general reconstruction of the subject, as suggested by the *Engineer*, we think this part of it should be first thoroughly investigated. If this is done, we shall be disappointed if the notion that powder must be rammed, and kept in a space so small as to insure a bursting pressure, is not sent after the old notion that locomotives could not work without cogged rails.—*Artisan.*

## WESTERN RAILROADS.

A struggle is now agitating the capitalists of the Northern route for the territorial trade. They are accordingly pushing their roads westward as if the battle was to the swift and victory to the strong. It should be interesting to St Louis, Cincinnati and the whole route on this latitude to inquire what can be done to secure at least a fair share of what is soon destined to be a most lucrative traffic. We noticed the other day the activity on the route to Omaha to connect with the Pacific road.

While this work is going on west of the Missouri, two railroad corporations—the Chicago and North-western, as the successors of the Iowa Central Company, and the Mississippi and Missouri railroad companies—are running a race to reach the Missouri river with their track so as to get an early connection with the line west of Omaha, and divert the upper Missouri trade to the lakes.

They are now within one hundred and twenty miles of Omaha and building westward as fast as capital and labor will admit. Their line starts from Dubuque The other company having reached Desmoines seem to have come to a halt; their line starts from Davenport. Possibly a rivalry may spring up between the two, advantageons to St. Louis. There is, however, great encouragement given to both by the bondholders interested in the railroads all the way from New York city to Chicago.

The Missouri Democrat says :

The strife for this trade is complicated by the Hannibal & St. Joseph road interest in the Atchison Pacific road, now building from Atchison to Topeca, but we have no fears for the result. Our main reliance. however, is upon the people of Missouri and of St. Louis to keep the trade of the Territories in the natural channels by a liberal spirit toward the people of the remote regions, whose dependence is upon this city. We shall have keen competition with Chicago, and nothing but a determination to retain the custom of the settlers in the Territories mentioned will serve our purpose. Still we must lend a helping hand to railroad improvements in Kansas, and continue to stretch our iron arms across the prairies and valleys of that State, until we can defy the utmost efforts of our rivals. This can be accomplished in a variety of ways, which the shrewdness of our capitalists, and enterprise of our railroad connections, must put into practice. In the mean time no exertion should be spared to insure the earliest completion of the Pacific Railroad to Kansas City. The problem whether Chicago or St. Louis shall be the depot for Montana, Colorado and Idaho is dependent upon the energy shown by the two cities; and judging by the work now in actual progress, we fear that, unless St. Louis rouses to a sense of danger, the prize which is worth millions to our merchants will slip through our fingers through sheer neglect.

## PREVENTION OF FIRES.

An unskillful attempt to apply a correct principle generally excites a prejudice against the principle. Phillips' fire annihilator was an instance of this; and the manager of it in this country occasioned further disrepute of it, than it might have acquired from the defective judgment of the patentee. The invention, in a commercial view, was a new and bad way of applying the old and good principle of suffocating fire. Applied properly, this principle would be useful wherever there is a large stock of valuable goods, that can be shut up nearly air-tight, as in a ship or warehouse.

If in a store that contains a stock of dry goods that would be damaged one half their value if saved from burning by the usual means of drowning, we put a vault containing materials to evolve a gas that will not support combustion and is so cleanly as not to damage the goods; and the materials, by operating from without, may be made to evolve gas with just enough rapidity to force air outward from all the cracks, and so prevent the influx of air to support combustion, the fire will be suffocated as soon as the air in the building is exhausted of its oxygen, or probably as soon as the part of it in the room where the fire is is partially exhausted. And if the provision for making gas were abundant, and the ventilators so disposed as to drive out the atmospheric air rapidly, and replace it by carbonic-acid gas—or other if better—the quantity burned would be inconsiderable. All the air in a building 50 feet high, and 100 deep, and 25 wide, would not burn half a ton of combustibles if it were carefully applied; and probably would not burn a hundred pounds if the best means were taken to prevent circulation of air and insure displacement of air by carbonic-acid gas.

In ships there generally is a tightness sufficient for the purpose; and if required, any deficiency of tightness may easily be remedied, and should be remedied to prevent the smell of the hold from annoying persons; and a systematic ventilation through openings for the purpose, by means of an air pump or fan, might be combined with the provision for suffocating fire, and in case of spontaneous combustion, the ventilator would give notice, by the odor, if properly watched.

For stocks of goods worth over half a million, buildings should be fire-proof. They should have iron floor-beams, stairs, doors, shelves and counters, with felting cemented on them to make them comfortable. The window-shutters should be well fitted, and should be made air-tight by india-rubber tubing filled with air. With good design and workmanship, a store would be little liable to combustion; a few hundred pounds might burn, and exhaust the oxygen from the air in the apartment, and the fire would die for want of air, even if it were not discovered and suffocated by a proper supply of carbonic acid.

Now that the important work of guarding against fires is passing from men of physical ability to men of intelligence, who are capable of appreciating the economy of preserving goods from damage by water and hasty removal, as well as from fire, we may hope for a consideration of these elements of safety The directors of insurance companies especially are interested in such improvements; it would be well for them to make improvements in this line a part of their business, with a view to profit: their rates will not be reduced until it is proved by long trial that the improvements are efficacious; and in the mean time they will have saved themselves from losses by whatever improvements they may have introduced. The commissioners, however talented, will probably be aided by the insurance men, and the inventors and engineers whom they may call to their counsels, if they take hold of this subject in a liberal spirit. —*Artisan.*

☞ The Supreme court in New York city has recently made a decision touching the liability of railroads in the transportation of baggage. A Mrs. Rawson, wife of a wealthy retired merchant in that city, was traveling from Pittsburg to Philadelphia in the night express, in September last, when the train she was on collided at Thompsontown with a coal train. Many were injured and several killed, Mrs. Rawson was in a rear car and escaped uninjured, but she had the inevitable big trunk and little trunk, and she proved to the satisfaction of even the defendant, the Pennsylvania railroad company, that the clothing and jewelry in the trunks were worth $4,000. To recover this sum she brought suit. The defense was that the company were not responsible as insurers for the safe transportation of baggage to the amount claimed. It was an unusual and unreasonable amount as to value, and there was a printed notice on the ticket stating that the company would not be liable for the baggage of passengers exceeding in value $100, or in weight 80 pounds. The plaintiff claimed that the pay for the safe transportation of trunks was included in the fare, and that the notice was not a contract. She recovered the full amount, having enumerated the various articles of her attire.

## PETROLEUM INTELLIGENCE.

A very valuable periodical, *The American Exchange and Review* of Philadelphia, contains some good remarks, in its last issue, concerning the speculative, the productive, and the property aspect of the petroleum interest. Says the *Review*, in concluding :

Notwithstanding new fields, weekly strikes of the bituminous fluid, and the great impetus which has been given within the last fifteen months to production, the product has fallen off and the number of unsuccessful drillings is immense. We hear of every oil strike—the report ever exaggerating the facts—but there is unbroken silence about the oilless wells. Still the ratio of drillers who get some oil is perhaps not less than in the best days of Oil Creek. As the decrease in the supply adds to the value of the oil when found, it has become an incentive to the opening up of new districts.

To cold lookers-on there is a perfect madness in the petroleum excitement; yet the least excitable of calculators, who sit down to figure up the results, are astonished to find how little the wildest anticipation of the most enthusiastic has so far outrun the course of events. Let us look a little at the method which is in this madness.

What is the actual relation of capital to production is the best question; a question not easily answered, however, as the figures by which the correct or full account of petroleum might be rendered can not be had. Still, sufficient approximation may be attained to make a reasonable reply to the query. Assuming that there are 2000 companies and partnerships in the United States, in the various stages of organizing or working, we may allow an average of $100,000 as the amount invested in each, which we believe high enough, for reasons which would be too much of a degression to state here. We thus have $200,000,000 as the aggregate of the capital which has been invested for production, most of which, it is true, has been absorbed as the profit of private parties. Now, as the lowest estimate of the net value (direct cost deducted) of the present product per month at the wells can not be less than $200,000,000, there is a present return of one per cent. a month upon the cost of all the purchases, while sixty per cent. of them have not attained the productive point, or the point at which production is to be determined.

### WEST VIRGINIA.

Oil boring is being vigorously prosecuted in Hancock county, with every prospect of success. In one of the wells now underway oil is brought up by the sand-pump. Another well has attained a depth of seven hundred feet, with very flattering prospects. The price of lands in that county has advanced very considerably, and numerous tracts are changing hands at advanced rates.

### OHIO OIL REGIONS.

The Marietta *Register* says the Acme Oil Company of Pittsburgh is in luck. Last week it struck a first-class oil well, on the farm of John Smithson, Sr., Aurelius township, this county, in the Duck Creek region. There was not a show until down over 460 feet, when the show appeared in a manner greatly delighting all concerned—the well overflowing with oil, all at once, and flooding the immediate vicinity. Several barrels of oil were afterward collected from holes in the ground, and from the surface of the creek. On Saturday evening at six o'clock, the pump had been rigged and was set to work. In five hours, forty-five barrels of oil had been pumped o

when the work was suspended for Sunday. Monday morning, as soon as it was disturbed, it again flowed. This is believed, by good judges, to be the best oil well ever struck in Washington County.

An oil-well was struck on the Beebe Farm, on the western limits of Washington County, in Decatur Township, about a week ago, that gives every promise of being a paying concern. The rigging for pumping was very poor, yet it yielded handsomely—one account says thirty-five barrels of oil within a few hours. It is owned, we believe, by a Boston company.

A big strike is reported at the Miller Well, at Lowell, now leased by McClintock, Stark & Co. The well had reached the depth of 320 feet, when a vein of mingled oil and water was struck, which spouted up with a loud noise to nearly the hight of the derrick. Another well is been sunk by the same firm, with flattering prospects.

The Stalder Well, in the Hocking Valley, five miles below Athens, was abandoned at a depth of 850 feet. The Athens *Messenger* of last week states that the sum of $10,000 has been raised to develop this well—boring it to perhaps 1300 feet.

An oil-well was struck a little over a mile back of Pomeroy, last Friday, belonging to Messrs. S S. Knowles and Eli Johnson, of Marietta, which has been doing finely—said to be a valuable well.

Oil in paying quantities has been discovered near Chandlersville, Muskingum County, O.

Petroleum from Asphaltum — A correspondent of the San Francisco *Bulletin* gives his experience about obtaining petroleum from asphaltum. After spending $5000 and ruining all his cloths, he abandoned the project in disgust. He mentioned several others, prominent men in San Francisco, who are convinced that illuminating oil can not be obtained from that article more than from water.

Oil Capital.—The capital known to be represented in the petroleum business in ten cities of the North is as follows:

| | |
|---|---|
| Philadelphia | $163,715,000 |
| New York | 134,045,000 |
| Pittsburgh | 15,740,000 |
| Boston | 2,300,000 |
| Baltimore | 1,750,000 |
| Titusville | 4,000,000 |
| Cleveland | 2,200,000 |
| Chicago | 1,000,000 |
| Cincinnati | 750,000 |
| Washington | 700,000 |
| | $226,200,000 |

The does not by any means include all the capital engaged, as very many companies do not come before the public at all with statements of their capital.

Atchison and Pike's Peak Railway.—The Atchison (Kansas) *Daily Champion* says: "We learn from Major Gunn that about two thousand Germans who have recently arrived in this country, are on their way to Atchison from New York, to work on the Atchison and Pike's Peak railroad The company had hired them, agreeing to pay them partly with twenty acres of land apiece, out of the late Kickapoo reservation, thus forming an important valuable colony of industrious citizens in our country, and also securing laborers for an important public work, which has heretofore been difficult to do."

## A FRENCH INVENTION.

The new Autographic Telegraph is to be immediately established in Paris. By means of this machine, in a few seconds the *facsimile* of a portrait, handwriting, or signature can be reproduced at a distance of several hundreds of miles. Thus, you wish to send your portrait from Paris to Vienna; every stroke of the artist's pencil, executed by means of the pantelegraphic machine in Paris, is simultaneously reproduced at Vienna. Two distinguished artists, MM. Berstall and Bauginet, drew likenesses which were instantly transmitted to a distance of four hundred miles. The great Rossini did the inventor the honor of composing a few bars of music, which were written and performed at the same moment at Marseilles and in Paris. M. Caselli has even accomplished painting in colors at a fabulous distance. For instance, at the office a rose appeared on a blank sheet of paper in the most brilliant coloring, telegraphed from the Imperial Observatory, both the flower and leaves being painted in the most natural colors. The process used is similar to that employed for painting leaves on stuff. The autographic telegraph transmits per hour thirty dispatches, containing thirty words in each. It is equally possible to stenograph by the pantelegraphic machine with marvelous rapidity, and from its peculiar construction, it will work under atmospheric circumstances which impede the action of ordinary telegraphs.—*Stockholder.*

Death of General William Cook.—We learn with regret that General William Cook, the Chief Engineer and a leading manager of the Camden and Amboy Railroad Company, died on Sunday, at his residence in Hoboken, from pleurisy. General Cook was widely known and universally esteemed, his scientific accomplishments, honorable instincts, and genial habits having attached all with whom he came in contact by the strongest ties of personal friendship. He was educated for the army at the National Military Academy at West Point, and upon graduating became a Lieutenant of Engineers. By permission of the War Department, he entered the service of the Comden and Amboy Company, and has remained in that service for upwards of thirty-five years.

Railways in England. — There is about £400,000,000 invested in railways in Great Britain; of this £300,000,000 is in shares, and the remaining £100,000,000 is on mortgage. Upon this latter probably an average interest of 4½ to 3¾ per cent. is paid. The cost of working the railways is about 49 per cent. The gross receipts from railway traffic for 1863 were £38,000,000, which would leave about £16,000,000, after deducting working expenses, for interest on capital and loans. If the government borrowed the whole amount invested at 3½ per cent., the interest would amount to £14,000,000, leaving £2,000,000 for the reduction of rates, or barely one fifteenth of the receipts.

☞ The West branch of the North Missouri road extends from Moberly City to Weston, 151 miles. The cost of construction and equipment is estimated at $30,000 per mile, to defray which the company is authorized to borrow $4,000,000 on first mortgage bonds on the whole road, besides the county subscriptions, which make a total of $5,025,000, giving $494,000 above the estimated cost.

The Pennsylvania Railroad.—The annual report of Enoch Lewis, Esq., General Superintendent of the Pennsylvania Railroad, contains many interesting facts in relation to the operations on that road for 1864. During the year the Bald Eagle Valley Railroad has been opened for business to Howard, nine and two-tenths miles beyond Milesburg, and the track has been laid down to Lock Haven, but is not yet ballasted or drained. As soon as it is practicable to do it, this road will be put in operation throughout its whole length, and it will form a very desirable connection between the Pennsylvania Railroad at Tyrone, and the Philadelphia and Erie Railroad at Lock Haven, opening a direct route between the valley of the West Branch and Pittsburgh.

The coal trade has continued very active, the whole tonnage moved being 1,086,779 tons, which is an increase of 183,580 tons over last year. 1200 joint cars are engaged in this trade between the Broad Top and Allegheny region and Port Richmond.

The live stock business has also been heavy, 237 stock cars have been added to the equipment during the year, and the new stock yards at East Liberty have been completed and brought into full operation. Two compromise tracks for the accommodation of this business have been completed between Pittsburg and East Liberty.

About four and half miles of second track on the main line have been completed and brought into use during the year, and sixteen and a half miles remain to be laid to complete the main road throughout its length. About eight miles of double track on the Columbia Branch have also been completed

The channel span of the iron bridge being erected over the Ohio river, at Steubenville, has been completed at Altoona shops during the year. A new double track Pratt bridge, of three spans, over the East Brandywine, at Downingtown, two boiler plate road bridges for Philadelphia division, and several small girder bridges, have also been completed there.

French Invention.—The new Autographic Telegraph is to be immediately established in Paris. By means of this machine, in a few seconds the *fac simile* of a portrait, handwriting or signature can be reprodnced at a distance of several hundreds of miles. Thus, you wish to send your portrait from Paris to Vienna: every stroke of the artist's pencil, executed by means of the pentelegraphic machine in Paris, is simultaneously reprodueed at Vienna. Two distinguished artists, MM. Berstall and Bauginet, drew likenesses which were instantly transmitted to a distance of four hundred miles. The great Rossini did the inventor the honor of composing a few bars of music, which were written and performed at the same moment at Merseilles and in Paris. M. Caselli has even accomplished painting in colors at a fabulous distance. For instance, at the office a rose appeared on a blank sheet of paper in the most brilliant coloring, telegraphed from the Imperial Observatory, both the flower and leaves being painted in the most natrual colors. The proeess nsed is similar to that employed for painting leaves on stuff. The autographic telegraphic transmits per hour thirty dispatches, containing thirty words in eaeh. It is equally possible to stenograph by the pantelegraphic machine with marvelous rapidity, and from its peculiar construction, it will work under atmospheric circumstanees which impede the action of ordinary telegraph.—*Stockholder.*

RAILROADS IN TENNESSEE.—The New York *Times* says that civil government has been restored to the State of Tennessee. Under the auspices of a loyal Governor and loyal Legislature, the old railroad debt of the State will be recognized as binding on the public faith, and immediate steps to restore punctuality of payment are recommended in the Governor,s message. The railway 6 per cent public debt amounts to $16,211,000; of which $13,761,000 is in the bonds of the State direct, and $2,550,000 by State endorsement of the Bonds of the Railway Companies The whole is a first mortgage lien of $10,000 per mile on the finished (and for the greater part) productive railways of the State. The arrearages of interest since the outbreak of the rebellion is about 24 per cent. These arrearages will probably be funded, and the prompt payment on the subsequent interest resumed In the case of the indorsed mortgage of the Nashville and Chattanooga Railroad, on which the arrearages of interest is about $300,000, on $1,535,000 indorsed bonds, the Governor believes that the War Department of the United States will owe the road upon account more than sufficient to liquidate this sum The recognized public debt, other than for railways, is stated at $8,894,606. The unrecognized debt is $8,000,000 of secession 8 per cent war bonds, which have never had currency at the North or in Europe.

—Marietta and Cincinnati Railroad—statement of approximate earnings for third week in April, 1865.

| | | |
|---|---|---|
| Passengers | $7,637 22 | $6,096 85 |
| Freight | 8,012 57 | 9,302 68 |
| Mail, Exp. & Telegrapb | 1,200 00 | 1,054 58 |
| Total | $16,849 79 | $16,354 11 |
| Total this month to date | 55,181 78 | 50,528 16 |
| Total for the fiscal year, commencing Jan. 1. | 333,424 62 | 284,063 07 |

—The stockholders of the Southern Michigan and Northern Indiana Railroad have elected for the coming year the following Directors, all but Mr. James H. Banker being re elections:

M. L. Sykes, Jr., President, Chicago, Ill.

Albert Havemeyer, Vice President, New York.

Henry Keep, Treasurer, New York.

John P. Acker, New York; James H. Banker, New York; Hamilton White, Syracuse, New York; N. Beardsley, Auburn, New York; Wm Keep, Lockport, New York; Wm. Williams, Buffalo, New York; J. S. Barry, Constantine, Michigan; Philo Morehouse, Elkhart, Indiana; Le Grand Lockwood, New York. The officers remain unchanged.

THE PITTSBURG AND STEUBENVILLE RAILROAD.—This road has been completed to within five miles of this city, and it is expected that a train will be run from the borough of Temperanceville to Burgettstown, Washington county, within six weeks This train will connect with another at Burgettstown, which will run to the Ohio river, opposite Steubenville. Arrangements have been entered into by the company with the Excelsior omnibus line to convey passengers and baggage to and from Temperanceville. The opening of this road will be of great advantage to the business prosperity of the city, as it will bring it into close connection with one of the finest agricultural districts in the State.—*Pittsburg Evening Chronicle, April* 26.

BEAR CREEK RAILWAY.—The Legislature of Pennsylvania has chartered the Bear Creek Railway, which is to commence at a point on the Pittsburgh and Erie road, between Sharpsburgh and Greenville, in Mercer county, near the Ohio State line, where the Atlantic and Great Western Railway crosses the Pittsburgh and Erie road. From this point the line runs eastwardly, directly through the heart of Mercer county, and by the town of Mercer—enters Butler county near the northwest corner, and passes entirely across the northern end of that county, to the little village of Martinsburgh on the bank of Bear Creek, from which point two or three miles more of the road will give it a connection with the Mahoning and Franklin road.

☞The annual report of the London Underground Steam Railway, three miles in length, shows that 11,721,889 passengers were conveyed over the line during the past year, against 9,455,175 in 1863, and that the receipts for the year amounted to £116,489.

RAILROAD LAW IN PHILADELPHIA.—A colored woman closely veiled took a seat in one of the cars and the color was not noticed till the conductor's attention was called to it by a passenger, when she was ejected. She brought suit, and Judge Allison charged the Jury that the passenger railway companies must conform to the terms of their charters. They were incorporated for the accommodation of the public, and rules that conduce to this end may be adopted. But they have no right to adopt rules to exclude a class. They may exclude individuals who may be offensive, for that interferes with the public accommodation, but they can not declare that because a man is a German, an Irishman, or a white or a black man. This does not effect individuals; it excludes a class, and is therefore illegal. The jury rendered a verdict for plaintiff for $50.

☞The extension of the Tyrone and Clearfield Railroad to Franklin is being agitated with much earnestness. The route is said to be a favorable one.

## STAMP DUTIES.

The following is an abridgment of the new Tax Law which goes into operation August 1, 1864:

AFFIDAVITS in suits or legal proceedings shall be exempt from stamp duty.

AGREEMENT or contract, &c.—for every sheet or piece of paper upon which either of the same shall be written ..... 5 cts.

BANK CHECK, draft, or order—Drawn upon any bank, banker or trust company, or for any sum exceeding $10, drawn upon any other person or persons, companies or corporations, at sight or on demand ..... 2 cts.

BILL OF EXCHANGE (Inland)—for a sum not exceeding $100 ..... 5 cts.

For every addition $100, or fractional part thereof. 5 cts.

BILL OF EXCHANGE (Foreign) or Letter of Credit—drawn in but payable out of the United States, if drawn singly or otherwise than in sets, shall pay the same rates of duty as inland bills.

If drawn in sets of three or more: for every bill of each set, where the sum made payable shall not exceed $100 ..... 2 cts.

And for every additional $100 or fractional part thereof ..... 2 cts.

BILL OF LADING or Receipt, for any merchandise or effects, to be exported from the United States to any foreign port ..... 10 cts.

BILL OF SALE, by which any ship or vessel shall be conveyed to any other person, when the consideration shall not exceed $500 ..... 50 cts.

Exceeding $500 and not exceeding $1,000 ..... $1 00

Exceeding $1,000, for every additional amount of $500 or fractional part thereof ..... 50 cts.

BOND—For indemnifying any person for the payment of any sum of money, when the money ultimately recoverable thereupon is $1,000 or less ..... 50 cts.

When in excess of $1,000. for each $1,000 or fraction ..... 50 cts.

BOND for due execution of duties of office ..... $1 00

BOND of any description, other than such as may be required in legal proceedings, or used in connection with mortgage deeds, and not otherwise charged in this schedule ..... 25 cts.

CERTIFICATE of stock in any incorporated company ..... 25 cts

CERTIFICATE of profits, showing an interest in the property of any incorporated company, if for a sum not less than $10 and not exceeding $50 ..... 10 cts.

Exceeding $50 and not exceeding $1,000 ..... 25 cts.

Exceeding $1 000 for every additional $1,000 or fractional part thereof ..... 25 cts.

CERTIFICATE.—Any certificate of damage or otherwise, issued by any port warden, marine surveyor, or other person acting as such ..... 25 cts.

CERTIFICATE of deposit of any sum of money in any bank or trust company, or with any banker, if for a sum not exceeding $100 ..... 2 cts.

For a sum exceeding $100 ..... 5 cts.

CERTIFICATE of any other description than those specified ..... 5 cts.

CHARTER PARTY—Contract or agreement for the charter of any ship or vessel, or steamer, between the captain, master, owner or agent, of the registered tonnage of such ship, or vessel, or steamer, does not exceed 150 tons ..... $1 00

Exceeding 150 and not exceeding 300 tons ..... $3 00

Exceeding 300 and not exceeding 600 tons ..... $5 00

Exceeding 600 tons ..... $10 00

CONTRACT—Broker's note, or memorandum of sale of merchandise, stocks, bonds, exchange, notes of hand, real estate or property of any kind, issued by brokers, each note or memorandum of sale ..... 10 cts.

CONVEYANCE.—Deed, whereby any lands, tenements, or other realty sold, shall be granted, assigned, &c., when the consideration or value does not exceed $500 ..... 50 cts.

When the consideration exceeds $500, and does not exceed $1,000 ..... $1 00

And for every additional $500, or fractional part thereof, in excess of $1 0 0 ..... 50 cts.

ENTRY of any goods, wares or merchandise at any Custom House, either for consumption or warehousing, not exceeding $100 in value ..... 25 cts.

Exceeding $100 and not exceeding $500 in value..50 cts.

Exceeding $500 in value ..... $1 00

ENTRY for the withdrawal of any goods or merchandise from bonded warehouse ..... 50 cts.

GAUGERS' RETURNS, if for a quantity not exceeding 500 gallons gross ..... 10 cts.

Exceeding 500 gallons gross ..... 25 cts.

INSURANCE (Life). Policy of insurance, or other instrument whereby any insurance shall be made upon any life or lives; when the amount insured shall not exceed $1,000 ..... 25 cts.

Exceeding $100 and not exceeding $5,000 ..... 50 cts.

Exceeding $5,000 ..... $1 00

INSURANCE (Marine, Inland and Fire). Each policy of insurance, or other instrument, the premium upon which does not exceed $10 ..... 10 cts.

Exceeding $10 and not exceeding $50 ..... 25 cts.

Exceeding $50 ..... 50 cts

LEASE, Agreement or Contract for the hire, use or rent of any land, tenement, or portion thereof, where the rent or rental value is $300 per annum or less ..... 50 cts.

Where the rent or rental value exceeds the sum of $300 per annum, for each additional $200 or fractional part thereof in excess of $300 ..... 50

MANIFEST for Custom House entry or clearance of the cargo of any ship, vessel or steamer for any foreign port; if the registered tonnage of such ship, vessel or steamer does not exceed three hundred tons $1 00

Exceeding three hundred tons and not exceeding six hundred tons ..... $3 00

Exceeding six hundred tons ..... $5 00

MEASURERS' RETURNS, if for a quantity not exceeding 1,000 bushels ..... 10 cts

Exceeding 1,000 bushels ..... 25 cts.

MORTGAGE of lands, estate or property, real or personal heritable or movable whats ever, or any personal bond as security for the payment of any definite or certain sum of money exceeding $100 and not exceeding $500 ..... 50 cts.

Exceeding $500 and not exceeding $1 000 ..... $1 00

And for every additional $500 or fractional part thereof in excess of $1,000 ..... 50 cts.

*Provided*. That upon each and every assignment or transfer of a mortgage, lease, or policy of insurance, or the renewal or continuance of any agreement, contract or charter, by letter or otherwise, a stamp duty shall be required and paid equal to that imposed on the original instrument

PASSAGE TICKET by any vessel from a port in the United States to a foreign port, not exceeding $35 ..... 50 cts.

Exceeding $35 and not exceeding $50 ..... $1 00

And for every additional $50 or fractional part thereof in excess of $50 ..... $1 00

POWER OF ATTORNEY ..... 25 cts.

Power of Attorney of proxy for voting at any election for officers of any incorporated company.... 10 cts.

Power of Attorney to sell and convey real estate, or to rent or lease the same ..... $1 00

PROBATE OF WILL, or Letters of Administration: where the estate and effects for and in respect of which such probate or letters of administration applied for shall be sworn or declared not to exceed the value of $2,000 ..... $1 00

Exceeding $2 000, for every additional $1,000 or fractional part thereof in excess of $2,000 ..... 50 cts.

PROTEST.—Upon the protest of every note, bill of exchange, acceptance, check or draft, or any ma-

rine protest ..... 25 cts.

WAREHOUSE RECEIPTS for property, goods, wares or merchandise, not otherwise provided for in any public or private warehouse, when the property or goods so deposited or stored shall not exceed in value $500 ..... 10 cts.

Exceeding in value $500 and not exceeding $1,000 20 cts.

Exceeding in value $1,000, for every additional $1,000 ..... 10 cts.

RECEIPTS for the payment of any sum of moneys or debt due exceeding $20, not being for satisfaction of any mortgage or judgment or decree of court, and a receipt for the delivery of any property ..... 2 cts.

WAREHOUSE RECEIPT for any goods, merchandise, or property of any kind, not otherwise provided for, held on storage in any public or private warehouse or yard ..... 25 cts.

WEIGHERS' RETURNS, if for a weight not exceeding five thousand pounds ..... 10 cts.

Exceeding five thousand pounds ..... 25 cts.

WRIT, or other original process by which any suit is commenced in any court of record ..... 50 cts.

Where the amount claimed in a writ issued by a court not of record, is $100 or over ..... 50 cts.

Upon every confession of judgment, cognovit, for $100 or over (except in those cases where the tax for the writ of a commencement of a suit has been paid 50 cts.

Writs or other process on appeals from justice courts or other courts of an inferior jurisdiction to a court of record ..... 50 cts.

WARRANT OF DISTRESS, when the amount of rent claimed does not exceed $100 ..... 25 cts.

When the amount claimed exceeds $100 ..... 50 cts.

*Provided* That no writ, summons or other process issued by and returnable to a Justice of the Peace, except as hereinbefore provided, or by any police or municipal court having no larger jurisdiction as to the amount of damages it may render than a Justice of the Peace in the same State, or issued in any criminal or other suits commenced by the United States or any State, shall be subject to the payment of stamp duties; *and provided further*, that the stamp duties imposed by the schedule B on manifests, bills of lading and passage tickets, shall not apply to steamboats or other vessels plying between ports of the United States and ports in British North America.

## MEDICINES OR PREPARATIONS.

For and upon every packet, box, bottle, pot, phial or other inclosure, where such packet, box, bottle, pot, phial or other inclosure, with its contents, shall not exceed, at the retail price or value, the sum of 25 cents ..... 1 ct.

Exceeding 25 and not exceeding 50 cents ..... 2 cts

Exceeding 50 and not exceeding 75 cents ..... 3 cts

Exceeding 75 cents and not exceeding $1 ..... 4 cts.

Where such packet, box, bottle or other inclosure, with its contents, shall exceed the retail price of $1 for each and every 50 cents, or fractional part thereof over and above the $1, an additional ..... 2 cts.

For and upon every packet, box, bottle or other inclosure, containing any essence, extract, toilet water, cosmetic, hair oil, pomade, hair dressing, hair restorative, hair dye, tooth wash, dentifrice, tooth paste, aromatic cachous, or any similar articles, by whatsoever name the same heretofore have been, now are, or hereafter be called, where such packet, box, bottle or other inclosure, with its contents, shall not exceed, at the retail price, the sum of 25 cents ..... 1 ct

Exceeding 25 and not exceeding 50 cents ..... 2 cts

Exceeding 50 and not exceeding 75 cents ..... 4cts

Exceeding 75 cents and not exceeding $1 ..... 3 cts.

Photographs, ambrotypes, daguerreotypes or any un picture, except as hereinbefore provided—upon each and every picture of which the retail price shall not exceed 25 cents ..... 2 cts.

Exceeding the retail price of 25 cents and not exceeding the sum of 50 cents ..... 3 cts.

Exceeding the retail price of 50 cents and not exceeding $1 ..... 5 s.

Exceeding the retail price of $1, for every additional dollar or fractional part thereof ..... 5 cts.

Playing Cards.—For and upon every pack, of whatever number, when the retail price per pack does not exceed 18 cents ..... 2 cts.

Exceeding the retail price of 18 cents and not exceeding 25 cents per pack ..... 4 cts.

Exceeding the retail price of 25 cents and not exceeding 50 cents per pack ..... 10 cts.

Exceeding the retail price of 50 cents and not exceeding $1 per pack ..... 15 cts.

Exceeding the retail price of $1, for every addition $150 cents or fractional part thereof, in excess of a ..... 5 cts

Where such packet, box, bottle or other inclosure, with its contents, shall exceed the retail price of $1, for each and every 50 cents, or fractional part thereof, over and above the $1, additional ..... 2 cts.

Friction or lucifer matches, for each parcel or package ..... 1 ct.

When in parcels or packages containing more than one hundred and not less than two hundred matches, for each parcel or package ..... 2 cts.

And for every additional one hundred matches or fractional part thereof ..... 1 ct.

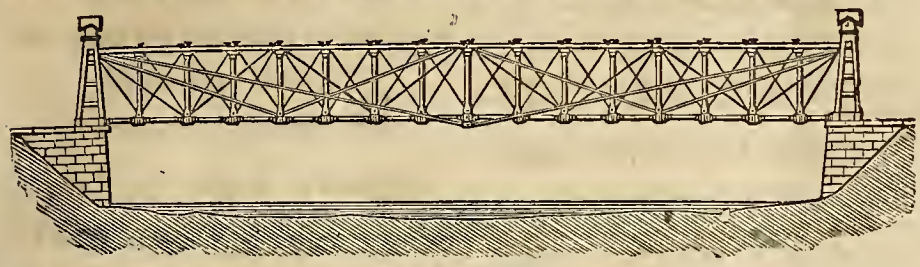
For all cigar lights and wax tapers—double the rates herein imposed upon friction or lucifer matches.

*Provided*, That the stamp duties herein provided for on friction or lucifer matches made in part of wood, or on cigar lights or wax tapers, shall not be imposed until Sept. 1, 1864; but until that time the tax shall be assessed and collected as heretofore; and on and after said Sept. 1 every package or parcel sold by any person, firm, company or corporation, shall be stamped as herein required.

# General Ticket Agents of the Principal Railroads.

| | | |
|---|---|---|
| Atlantic Great Western Railway | T. H. Goodman, General Ticket Agent, | Meadville, Pa. |
| Buffalo & Erie | J. A. Burch, General Ticket Agent, | Buffalo, N. Y. |
| Buffalo, New York & Erie | Wm. L. Doyle " " " | Buffalo, N. Y. |
| Buffalo Lake Huron | Thos. W. Bussell, " " " | Brantford, C. W. |
| Burlington Missouri River Railway | L. Carper, " " " | Burlington, Iowa, |
| Boston Worcester | L. K. Miles, " " " | Boston, Mass |
| Bellefontaine Railway Line | Chas. Wood, Gen. Ticket Agent, | Terre Haute, Ind |
| Boston Providence | James Dilley, Ticket Agent, | Boston, Mass. |
| Baltimore Ohio | L. M Cole " | Baltimore, Md. |
| Bost. Concord Mont. and Wh. M | J. L. Rogers, " | Plymouth, N. H. |
| Chicago, Mil. LaCrosse St. Paul | A. V. H. Carpenter, Gen. Ticket Agent, | Milwaukee Wis. |
| Chicago, Burlington Quincy | Samuel Powell, General Ticket Agent, | Chicago, Ill. |
| Chicago R. Island and Miss. & Mo. | W. L. St. John, " " " | Chicago, Ill. |
| Chicago, Alton & St Louis | Joseph Price, Treasurer, | Chicago, Ill. |
| Chicago North Western | E. P. Cutler, General Ticket Agent, | Chicago, Ill. |
| Connecticut Passumpsic Rivers | Nathaniel P. Lovering, " " " | St Johnsbury, Vt. |
| Chicago, Iowa Nebraska | Jas. M. Ham, General Passenger Agent, | Clinton, Iowa, |
| Central Railway of New Jersey | H. P Baldwin, General Ticket Agent, | 69 Wall Street, N. Y. |
| Catawissa Railway Co | H. H. Mc Donnell, Freight and Passenger Accountant, | Philadelphia, Pa. |
| Central Ohio | John W. Brown, General Ticket Agent, | Columbus, Ohio. |
| Columbus Indianapolis R R | F. Chandler, " " " | Indianapolis, Ind. |
| Cincinnati, Zanesville | E. S. Lowe, " " " | Cincinnati " |
| Cincinnati Chicago Air-Line | L. H. Walkley, " " " | Richmond, Ind |
| Cheshire | R. Stewart, " " " | Keene, N. H |
| Connecticut River Railway | E. Morgan " " " | Springfield, Mass. |
| Cleveland, Painesville Ashtabula | J. W. Cary, " " " | Cleveland, Ohio. |
| Cleveland Pittsburg | P. R. Myers, " " " | " " |
| Cleveland Toledo | John U. Parsons, " " " | " " |
| Cleveland, Columbus Cincinnati | H C. Marshall, " " " | " " |
| Cincinnati, Hamilton Dayton | P. W. Strader, " " " | Cincinnati, " |
| Concord, Manchester Lawrence | Geo. G. Sauborn, " " " | Concord N H. |
| Dayton Michigan | P. W. Strader, " " " | Cincinnati, Ohio |
| Dubuque, South-Western | Geo. W. Farley, Receiver, | Dubuque Iowa. |
| Dubuque Sioux City | J. A. Pinto, General Ticket Agent. | Dubuque, Iowa. |
| Detroit Milwaukee | Jas. H. Muir, Auditor, | Detroit, Mich |
| Erie Railway | Wm. R. Barr, General Passenger Agent. | New York. |
| Eaton Hamilton | E. W. McGuire, General Ticket Agent. | Eaton, Ohio |
| Evansville Crawfordsville | J. E. Martin, Secretary, | Evansville, Ind |
| Elmira Williamsport | Edmund B Smith. General Ticket Agent. | Elmira, N. Y |
| East Pennsylvania | Philip M. Ermentrout, " " " | Reading, Pa. |
| Erie Pittsburg | J A Burch, " " " | Buffalo, N. Y |
| Fitchburg Railway | H F. Whitcomb, " " " | Boston, Mass |
| Great Central Railway Line | F. Chandler, General Ticket Agent, | Indianapolis, Ind, |
| Great Western Railway (Canada) | J. Charlton, Auditor, | Hamilton, C. W. |
| Great Western Railway Co of 1859 | W. D Richardson, General Ticket Agent, | Springfield, Ill |
| Grand Trunk Railway (Canada) | Henry Shackell, Auditor, | Montreal C. E |
| Hudson River Railway | C. H. Kendrick, General Ticket Agent. | New York. |
| Hannibal St. Joseph | P. B Groat, " " " | Hannibal, Mo |
| Indianapolis Cincinnati | F. B. Lord, " " " | Indianapolis, Ind. |
| Indianapolis, Peru Chicago | V. T. Malott, Treasurer, | Indianapolis, Ind |
| Illinois Central | Wm P. Johnson, General Passenger Agent, | Chicago, Ill. |
| Indiana Central | F. Chandler, General Ticket Agent, | Indianapolis, Ind |
| Jeffersonville | Jas. Ferrier " " " | Jeffersonville, Ind. |
| Kentucky Central | H. P. Ransom, General Ticket Agent, | Covington Ky. |
| Keokuk, Ft. Des Moines Minn | John Givin, " " " | Keokuk, Iowa. |
| Little Miami and Columbus Xenia | P. W. Strader " " " | Cincinnati, Ohio. |
| Logansport, Peoria & Burlington | E. M. Whitlock, Chief Clerk, | Peoria, Ill. |
| La Crosse Milwaukee | J M. Kimball, General Ticket Agent, | Milwaukee, Wis. |
| Louisville Frankfort and Lex. & F | Henry Stellee, General Freight and Ticket Agent, | Louisville, K |
| Lafayett, Indianapolis | John M Kerper, General Ticket Agent, | Lafayette, Ind. |
| Louisville New Albany Chicago | J. G. Williamson, " " " | New Albany, Ind |
| Louisville & Nashville | D. A. Kean, Chief Clerk, | Lonisville, Ky |
| Michigan Central | Thos. Frazer, General Ticket Agent, | Detroit, Mich. |
| Mich. Southern & Northern Indiana | C. P. Leland, " " " | Toledo, Ohio. |
| Milwaukee Prairie du Chien | E. P. Bacon, " " " | " " |
| Milwaukee St. Paul | F. W. Spear, General Ticket Agent | Milwaukee, Wis. |
| Marietta & Cincinnati | Chas. F Low, General Ticket Agent, | Chillicothe, Ohio. |
| Montreal Champlain | J. F. Barnard, " " " | Montreal, C. E. |
| New York Central | E. F. Folger, Chief Clerk, | Albany, New York. |
| New York, Harlem Albany | R. R. Freeman, General Ticket Agent. | New York. |
| Norwich Worcester | Edward T. Clapp, Secretary, | Norwich, Conn. |
| Northern Central | Edward S. Young, General Ticket Agent, | Baltimore, Md. |
| New York New Haven | Jacob Mendel, " " " | New York. |
| New Haven Northampton | E. A. Ray, Superintendent and Clerk, | Westfield M |
| North Missouri | Jas. H. Concannon, General Ticket Agent, | St. Louis, Mo. |
| Northern (N. H.) | A. C. Warren, " " " | Concord, N. H |
| N. Haven, N. London Stonington | Wm. T. Bartlett. " " " | New Haven, Conn. |
| North Pennsylvania | Ellis Clark, " " " | Philadelphia, Pa |
| Northern New York | Marshall Conant, " " " | Malone, N. Y. |
| Ohio Mississippi | Chas. E. Follett, " " " | Cincinnati, Ohio. |
| Philadelphia Reading | John Welch, General Ticket Agent. | Philadelphia, Pa. |
| Pennsylvania Railroad | H W. Gwinner, " " " | " " |
| Pittsburg, Columbus Cincinnati | Ira A. Hutchinson, General Ticket Agent, | Columbus, Ohio |
| Pittsburg, Fort Wayne Chicago | H. R. Payson " " " | Pittsburg, Pa. |
| Pacific Railway, of Missouri | E. W. Wallace. General Ticket Agent, | St. Louis, Mo. |
| Philadelphia, Wilmington Balt | Geo. A. Dadmun, " " " | Philadelphia, Pa. |
| People's Line of Steamers (N. Y. | John C. Hewitt, " " " | New York |
| Providence Worcester | Wm. M. Durfee, " " " | Providence, R I |
| Portland, Saco & Portsmouth | Elphalet Nott, Treasurer, | Portland, Me. |
| Quincy Toledo | W. D. Richardson. General Ticket Agent. | Springfield. Ill. |
| Racine Mississippi | R. C. Tate, " " " | Racine, Wis. |
| Rutland Washington | John McKeogh, " " " | Rutland, Vt. |
| Rutland Burlington | Wm. A. Burnett " " " | " " |
| Rome, Watertown Ogdensburg | H. T. Frary, " " " | Watertown, N. Y |
| Rensselaer Saratoga | O. N. Crandall, " " " | Troy, N. Y. |
| Sandusky, Dayton Cincinnati | J. M. Webster, " " " | Sandusky, Ohio. |
| Sandusky, Mansfield Newark | H. M. Bronson, " " " | " " |
| Saratoga Whitehall | J H. Sternbergh, " " " | Saratoga Springs N |
| The United States Mail Line Co | Thos. Sherlock, Treasurer, | Cincinnati, Ohio. |
| Terre Haute, Alton St. Louis | Jas. B Ralston. General Ticket Agent, | St. Louis, Mo. |
| Terre Haute & Richmond | Chas Wood, Secretary, | Terre Haute, Ind |
| Troy Boston | C. W. Moseley, General Ticket Agent, | Troy, N. Y. |
| Toledo Wabash | J. E. Carpenter, Cashier, | Toledo, Ohio. |
| Vt. Can., Vt. Central, and Sullivan | H. H. Locklin, General Ticket Agent, | St. Albans, Vt. |
| Western (Mass.) Railway | M. Griggs, " " " | Springfield, Mass |
| Worceste Nashua | M. Wiber, " " " | Worcester, Mass. |

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '53. 1y. Letter Box, 1302. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27-1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

*Philadelphia, Pa.*

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines. 419 y 1

---

## KNOX & SHAIN,
## Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA

---

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

## FINDINGS

—AND—

## MACHINERY,

OF EVERY DESCRIPTION

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,
## Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles,

Manner, at the Shortest, and on the

Most Reasonable Terms.

---

## Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

MACHINE SHOP

SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

## RAILWAY SPRINGS.

**FREIGHT**

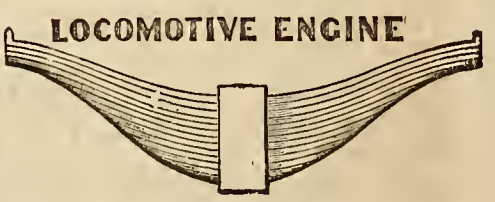




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

ELLIPTIC AND SEMI-ELLIPTIC

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

PHILP S JUSTICE,

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

No. 47 West Front St., CINCINNATI, O.

PERKINS & LIVINGSTON,

54 Exchange-Place, New York.

---

## W. M. F. HEWSON,
## STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT.

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged: and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY

W. P. SMITH, *Master Transportation, Baltimor*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday nigbt, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin & Chicago Air Line Express | 7 00 P. M. | 2 35 A. M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A. M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Buses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St. Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
General Ticket Agent.

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 3:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Age't.

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2 MOSELEY & CO.
BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

**Lewistown, Mifflin Co., Penn**

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

**Rebuild and Repair Locomotives.**

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—½ to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**

## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11.30 P. M. night.

On Sundays, 4.30 A. M.; 11.30 P. M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M. (Express).

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West

WM. TEARNE SUPT.

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON, } Editors

CINCINNATI:

THURSDAY, MAY 11, 1865.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Cincinnati Express | 6.00 A. M. | 7.30 P. M. |
| Mail | 9.00 A. M. | 8.15 A. M |
| Columbus Accommodation | 4 00 P. M. | 11.30 A. M. |
| Morrow Accommodation | 6.20 P. M. | 8.00 A. M. |
| Night Express | 10.00 P. M. | 10.05 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky Mail | 7.00 A. M. | 5 45 P. M. |
| D yton & Toledo | 7.00 A M. | 9.45 P. M. |
| Cin. & Chicago Air Line Express | 7.00 A. M. | 9.45 P. M. |
| Dayton Accommodation | 2.20 P. M. | 5.45 P M. |
| Dayton, Toledo & Detroit, Huntsville | 5.00 P M. | 10 20 A. M. |
| Cin & Chicago Air Line Express | 7.00 P. M. | 12.35 P. M. |
| Hamilton Accommodation | 7.00 P. M | 8.05 A. M. |
| do do | 10.00 A. M. | 6.45 A. M. |
| *Marietta & Cincinnati—* | | |
| Mail Express | 7.40 A. M. | 7 00 P. M. |
| Chilli othe Accommodation | 3.30 P. M. | 11.30 A. M. |
| *Ohio & Mississippi—* | | |
| Louisville, St. Louis and Cairo Mail | 7.00 A. M. | 11.30 P M. |
| St. Louis and Cairo Express | 6.00 P. M. | 5.00 A. M. |
| Louisville, St. Louis and Cairo Express | 7 40 P. M. | 8.20 A. M. |
| *Indianapolis & Cincinnati—* | | |
| St. Louis and Chicago Express | 6.30 A. M. | 11.00 A. M. |
| Mail | 1.00 P. M. | 5.00 P. M. |
| Night Express | 4 00 P. M. | 1.00 A. M |
| Lawrenceburg Accommodation | 4.25 P. M. | 8.35 A. M. |
| Harrison Accommodation | 9.00 A. M. | 3.00 P. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Morning Express | 9 00 A. M. | 7.30 P. M. |
| Accommodation | 4.00 P. M. | 8.05 A M. |
| *Kentucky Central,—* (City time.) | | |
| First Train | 6.00 A. M. | 10.40 A. M. |
| Second Train | 2.00 P. M. | 6 00 P. M |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.


## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.



### ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

### THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers and Proprietors.


## LANDED PROPERTY.

ITS VALUE AND IMPROVEMENT.

In statistical inquiries relating to property and political economy, a great difficulty in arriving at general propositions and safe conclusions is, the almost impossibility in arriving at a *unit of value.* In some of the United States, from the establishment of State statistics, in addition to those of the United States, we have the means of ascertaining the value and increase of property, by the State valuations, the ascertainment of crops, taxation, &c. In New York, Massachusetts and Ohio we have statistics of this kind. In Ohio the value and production of lands has been obtained with sufficient accuracy to furnish reliable data. We shall examine the state of landed property in Ohio, with a view to ascertain something like a measure, not only of relative values, but of growth. The last is the valuable and interesting fact, if we can get at it. Every year there is a given population, living in a given space of ground, a certain amount of *labor expended on land.* Now, a large part of that labor is expended in producing crops; and another part in those necessary repairs and measures, which are essential to prevent deterioration. But after all this there is another large part which goes to improve and increase the permanent value of lands. We have, in a former article, given the statistics of new structures in Ohio; which is one of the ways in which landed property is improved. Take another; if a farmer, cultivating last year forty acres of land, this year clears up and prepares ten acres more, he will have fifty acres instead of forty in cultivation, and he will have added two hundred dollars to the value of his farm. Let us see now how this gradual accretion of landed wealth has gone on in Ohio.

1. The total *quantity* of land returned for taxation in Ohio is returned by the commissioner of statistics as follows.

The total quantity of land in Ohio is 25,376,960 acres. The quantity returned for taxation in various years, as appears from the auditor's report, were:

| | acres. |
|---|---|
| In 1841 | 21,041,784 |
| " 1845 | 23.456,486 |
| " 1850 | 26,220,083 |
| " 1855 | 25,220,083 |
| " 1860 | 25,316,099 |
| " 1861 | 25,321,705 |
| " 1862 | 25,329,580 |
| " 1863 | 25,360,407 |
| " 1864 | 25,341,345 |

A portion of the lands of the lands Ohio, belonging to the United States Government, were not sold till recently.

2. The valuation of these (including all town property) was, at different periods, as ollows:

| | |
|---|---|
| In 1841 | $100,851,837 |
| 1845 | 108,185,744 |
| 1850 | 341,388,838 |
| 1855 | 578,858,539 |
| 1860 | 639,894 311 |
| 1861 | 643,885,552 |
| 1862 | 645,670,080 |
| 1863 | 649,500,022 |
| 1864 | 655,498,100 |

In 1864 the town lots were valued at $157,276,511. In the report of the commissioner of statistics for 1860, it io snown that the surface occupied by lots was 28,333 acres, and the surface occupied by roads 425,000 acres, making 453,333 acres, which sbould he deducted from farming lands.

Deducting the value of town lots, which in the average is about 22 per cent.; and we have the value of lands proper as follows:

| | |
|---|---|
| In 1841 | $78,500,000 |
| 1850 | 267,500,000 |
| 1855 | 450,000,000 |
| 1860 | 498,200,000 |
| 1864 | 511,000,000 |

Taking the quantity of land above given, we find the value of *farm lands* per acre in Ohio for the last year to have been as follows:

| | |
|---|---|
| In 1841 | $3.70 per cent. |
| 1850 | 12.70 " " |
| 1855 | 18.00 " " |
| 1860 | 19.00 " " |
| 1864 | 20.25 " " |

From 1850 to 1860 the increase in farm lands was $6.30 per acre; or 100 per cent. advance. From 1855 to 1864 the advance was $2.25 or slightly more than 12 per cent. We may here say that the valuation of lands in Ohio is not made with any reference to the state of the currency. The law requires a *cash* valuation; which is much below the selling value.

It appears that the amount of farm lands held in the United States (per census statistics) is:

| | acres |
|---|---|
| Improved lands | 163,110,720 |
| Unimproved | 244,101,800 |
| Total | 407,212,529 |

This comprehends only included farms and no wild land. Of this the quantity set down to Ohio is 20,472,000; which is just *one twentieth* of the whole. At $2025, the value of Ohio lands, the aggregate would be $8,145,000. In fact the aggregate value in the census returns was $6,631,000—Ohio being far above the average.

In the United States the order in regard to the value of lands per acre (including towns) is as follnws:

| | |
|---|---|
| New Jersey | $60.00 |
| Massachusetts | 44.00 |
| New York | 42.00 |
| Pennsylvania | 39.00 |
| Connecticut | 36.00 |
| Ohio | 33 00 |
| Deleware | 31.00 |
| Maryland | 30.00 |
| Vermont | 23.00 |
| Michigan | 23.00 |
| Indiana | 22.00 |

| | |
|---|---|
| Louisiana | 22.00 |
| Missouri | 21.00 |
| New Hampshire | 19.00 |
| Illinois | 19.00 |
| Wisconsin | 16.00 |
| Kentucky | 15.00 |
| Tennessee | 14 00 |
| Virginia | 12.00 |
| Iowa | 12.00 |
| Maine | 12.00 |

There are fifteen other States most of which average less than $10.00 per acre. It is very obvious that New Jersey, New York, Massachusetts and Connecticut derive a large part of their value from towns; and equally that the mines of Pennsylvania, as well as towns, make up a large part of its value; so that looking to agricultaral uses and to the value of farms only, Ohio is really the first agricultural State of the Union.

In New York the acres of land and valuation are as follows:

| | |
|---|---|
| Total number of acres | 27,546,846 |
| Total valuation | $1,113,779,352 |
| Average value per acre | 40.00 |

This varies from the table above; hut this is the valuation of the State and the former that of the United States census. Both include the values of the cities, which in New York are very great. If we take from the general aggregate the valuation of the city of New York, the valuation per acre will but little exceed that of Ohio.

The valuation of Chatanque county, one of the largest and finest counties in this country, does not exceed that of the county of Warren, Ohio, an entirely inland county. Chatanque county contains 250,000 acres of land more than the county of Warren (Ohio) and proportionally more people; but it is not so productive as the Ohio county. Notwithstanding the immense immigration to the west and the flowing out of agricultural population from the older States, the *improvement* of lands in the old States is constantly going on; and many parts of the old States are, we imagine, as well cultivated as many parts of Europe. What the lands of the populous States want, and are now receiving, is *capital*. It is the union of capital and land which alone can make farming profitable.

## INFLUENCE OF RAILROADS ON AGRICULTURE.

The following article, published in the introduction to the statistics of agriculture in the United States, was prepared by E. D. Mansfield, Esq., and is republished to give some illustration of the vast utility of railroads to the farmers of the country. The following table of horses produced in the United States is given to show that the railroads have not diminished hut rather increased the number; contrary to the anticipations of many persons when railroads were begun.

*Number of horses employed in agriculture and for other purposes in the five great States of the west:*

| States. | 1850. | 1860. | Inc. per ct. |
|---|---|---|---|
| Ohio | 466,820 | 753,881 | 61 |
| Indiana | 320,898 | 592,069 | 84 |
| Illinois | 278,626 | 724,138 | 160 |
| Michigan | 58,576 | 167,999 | 186 |
| Wisconsin | 30,335 | 145,584 | 380 |
| Aggregate | 1,155,255 | 2,383,671 | 106 |

In these five States there have been constructed since 1850 nearly nine thousand miles of railroad; and yet there we find this extraordinary increase in the number of horses. We do not present this as evidence that the construction of railroads necessarily augments the demand therefor, and therefore increases the number of horses, although we have no douht that such is the case; but simply to show that railroads have not diminished one of the great clements in competing means of transportation. It must be recollected that only forty years ago the only means of transporting goods and products between the eastern and western States was by wagons, and that the business of trapsportation in this way was as much a hnsiness, on relatively as large a scale, as that of transportation by canal and railway is now. The first great change in this mode of transportation was by the New York and Pennsylvaura canal; but the whole business of the canals in the first years of their introduction was small in comparison with that of the railroads now. Hence it seemed that railroads must diminish the number and importance of horses, but such was not the fact; and we shall see in this, as in the case of all animals, that railroads tend to increase their number and value. This is now an established principle, which we shall illustrate in regard to other domestic animals.

Although hut slightly connected with the interests of agriculture, we may here state another fact, that since the introduction of railroads, the building and employment of steam boats on our interior rivers have also increased largely, so that, even where railroads have competed directly with them, the steamhoat interest has continued to increase in value and importance. This has not been always, we admit, in direct proportion to the growth of the country, hut enough to show that, even where competition was greatest, this interest has not been injuriously affected. More than double the number of steamers were built on the waters of the interior west in 1861 than were in 1850.

We advance these facts, not so much to show the direct and positive influence of railroads on agriculture, as to show that there is no interest of agriculture and commerce that railroads have injured, even, when upon the most plausible theories, such results were anticipated.

We now proceed to show the positive advantages which all departments of agriculture have derived from the construction of railroads. So great are their benefits that, if the entire cost of railroads between the Atlantic and western States had been levied on the farmers of the central west, their proprietors could have paid it and been immensely the gainers. This proposition will become evident if we look at the modes in which railroads have been beneficial, especially in the grain growing States. These modes are, first, in doing what could not have been affected without them; second, in securing to the producer very nearly the prices of the Atlantic markets, which is greatly in advance of what could have been had on his farm; and, third, by thus enabling the producer to dispose of hie products at the best prices at all times, and to increase rapidly both the settlement and the annual production of the interior States. A moment's reference to the statistics of internal commerce will illustrate these effects so that we can see the vast results which railroads have produced on the wealth and production of the country.

1. If we examine the rontes and tonnage of the trade between the Atlantic cities and the central western States, we shall find some general results which will prove the utter incapacity of all other modes of conveyance to carry on that trade without the aid of railroads. Between Lake Erie on one side and the Potomac on the other, the commerce between the east and west is altogether carried on by way of several great arteries, which are these, viz: the Erie canal, the Oswego canal, the Champlain canal, the Central railroad, the Erie railroad, the Pennsylvania railroad, and the Baltimore and Ohio railroad. There are no other great channels of conveyance between the east and the west, and in fact no other routes appear practicable. However large an amonnt of product or merchandise may be carried by the lakes, it must he shipped to or from Buffalo, Oswego, or Ogdensburg. However multiplied may be the routes by rail or canal, by which products may arrive at Buffalo, Pittsburg, Wheeling or Parkersburg, all the freights carried over them going east must pass over these great routes. We have, therefore, the means of determining accurately the relative transportation by different routes and modes. The different modes are all reduced to two—canals and railroads. The proportion of tonnage on these several lines of conveyance, as reported in 1862, was as follows:

| CANALS. | TONS. |
|---|---|
| Erie canal | 2,500.762 |
| Oswego canal | 852,920 |
| Champlain canal | 650,000 |
| Aggregate | 4,003,681 |

But we must observe that the Oswego canal joins to the Erie canal, and its tonnage, arriving at or leaving Albany, is included in that of the Erie canal. In fact, the tonnage of the canals, which is counted at Albany, is only that of the Erie and the Champlain, and of the latter but a small portion goes to or from the west. We have at the utmost, then, the carriage on canals between the Atlantic cities and west of 3,150,000 tons.

| RAILROADS. | TONS IN 1862. |
|---|---|
| Pennsylvania railroad | 1,792,064 |
| Erie railroad | 1,632,955 |
| New York Central railroad | 1,387,433 |
| Baltimore and Ohio (estimated) | 1,200,000 |
| Aggregate tonnage of these line | 6,018,452 |

We observe that in 1862 the tonnage of the six great arterial lines of transportation between the east and west amounted to over nine millions of tons, of which only one-third were carried by water. We must recollect that this was the case when the Erie canal of New York had been enlarged and refitted with the express purpose of transporting the products of the west, and was supplied with five thousand canal boats. It is evident, therefore, that railroads not only carry two-thirds of the freights to and from the west at the present time, but that such is the rapid increase of western products, and the surplus carried to Atlantic or foreign markets, that the time is near when all that can be carried by water will be but a small proportion of the whole. The transportation by wagons is no longer possible to carry the surplus products of the interior States to either foreign of domestic markets. In fine, in the absence of railways the cultivation of grain beyond the immediate wants of the people must cease, or the surplus perish in the fields. Such was exactly the state of things in the west before the general introduction of railroads. The great grain-fields of Ohio, Indiana, Illinois, and beyond the Mississippi, have been mainly cultivated because railroads made their products marketable and profitable. In one word, railroads did what could not have been done without them.

2. Railroads secured to the producer very nearly the prices of the Atlantic markets, which was greatly in advance of any price which could possibly be obtained in western markets. It might be supposed that if the carriage of a bushel of grain from Sandusky to New York was reduced from forty cents a bushel to twenty cents, the gain of twenty cents would inure, in part at least, to the consumer; but experience shows this is not the fact. The gain of twenty cents inures to the producer In proof of this it will be sufficient to adduce two or three well known facts. The prices of flour and meat at New York (estimating them at the gold standard) have not been reduced in the least, notwithstanding the immense quantities of the products of grain imsorsed into that city. On the other hand, the prices at Cincinnati, on the Ohio, have doubled, and in some articles, such as pork, have trebled. The great bulk of the gain caused by the cheapness of transportation has gone to the producer. This depends on a general principle, which must continue to operate for many years. The older a country is, the more civio and the less rural it becomes; that is, the greater will be the demand for food, and the less the production. The competition of the consumer for food is greater than that of the producer for price. Hence it is that Europe, an old country, filled with cities, makes a continual demand on this country for food. Hence it is that New England and New York, continually filling up with manufactures, artisans, and cities, must be supplied with increased quantities of food from the interior west; and hence, while this is the case, prices can not fall in the great markets. Hence it is that the cheapening of transportation inures to the benefit of the agricultural producer. New England consumes more than a million barrels of western flour. The transportation is cheapened a dollar per barrel; and thus, in New England alone, in the single item of flour, a million of dollars, net profit, is put into the pockets of the western farmer by the competition of railroads; for a large portion of this flour is carried over the Massachusetts Western railroad. It is entirely true that the manufacturer of New England shares, on his side, in the gain of cheap transportation; but we are here considering simply the influence of railroads on agriculture.

In the western markets the gain to the farmer is palpable in the enhanced prices of every article. At Cincinnati, in 1848 and 1849, (which was the beginning of the greatest railroad enterprises,) the average price of hogs was $3 per hundred. In 1860 and 1861 it was double that, and has continued to increase. This was a net gain to the farmers of Ohio alone of from three to four millions of dollars. In the entire west it was a profit of more than twenty millions on this single animal; for, if there were now no railroads, this product could not be carried to market except on foot, which would take away half the value. No further illustration of this point need be made. Take the market prices of New York and Boston, on the Atlantic, and of St. Louis and Cincinnati, in the west, at an interval of twenty years, and it will be seen that the cheap prices of the west have gradually approximated to the high prices of the east, and this solely in consequence of cheapening the cost of transportation, which inures to the benefit of the farmer.

3. By thus giving the farmer the benefit of the best markets and the highest prices, railroads have increased the agricultural productions of the interior States beyond anything known in the world. We have already shown that this increased production, or rather its surplus, could not have been carried to market without the aid of railroads, more than two-thirds of the whole being caried off by that means. Let us now reverse this operation; and we find, on the other hand, that railroads have stimulated and increased production. The northwestern States are those in which the influence of railroads on agricultnre is most obvious. In the five States of Ohio, Indiana, Illinois, Michigan and Wisconsin, there were comparatively few miles of railroad prior to 1850; but from 1850 to 1860 the construction of railroads was most rapid. In 1850 there were only 1,275 miles of railroad in those States, but in 1860 there were 9,616 miles. Let us now examine the products of those States in 1850 and 1860, and see how the progress of railroads has sustained and stimulated agricultural production. The following table shows the increase of the principal vegetable and animal production in the five States of Ohio, Indiana, Illinois, Michigan and Wisconsin in the ten years from 1850 to 1860:

| | In 1850. bushels. | In 1860. bushels. | Inc. per ct. |
|---|---|---|---|
| Wheat | 39,348,495 | 79,798,163 | 100 |
| Corn | 117,320,441 | 280,268,862 | 58 |
| Oats | 32,660,251 | 51,043,334 | 50 |
| Potatoes. | 13,417,896 | 27,181,692 | 100 |
| Cattle | 3,438,000 | 5,371,000 | 59 |

This increase is decidedly beyond that of the population; showing that the products of agriculture are, in those States, profitable. The aggregate of grain products in those States was:

| | bushels. |
|---|---|
| In 1850 | *255,240,444 |
| In 1860 | *422,369,719 |

What part railroads have had in carrying this product to market we shall see by† ascertaining the surplus, and the manner in which it was transported. The commissioner of statistics for the State of Ohio, in his report to the legislature of Ohio, estimates (in the actual carriage of railroads and canals) that *three-fifths* of the value of agricultural products of Ohio are exported, excepting, of course, pasturage, fruits, garden products, &c. In 1859 –'60, twelve millions of bushels of wheat were exported from that State, and an equal proportion of corn, reduced into other forms, such as fat cattle, hogs, pork, lard, whisky, cheese, &c. Three-fifths of the aggregate grain production of these five States (1860) will give two hundred and fifty millions of bushels of grain. This is vastly greater than the whole tonnage of canals and railroads, and would, therefore, seem incortect. This, however, is not so, The heaviest article (corn) is reduced to a fourth, perhaps, less weight by being changed into whisky, pork and cattle. The same is true of oats, and thus the ten millions of tons represented by the canals and railroads may cover all the surplus which finds the extreme eastern markets. A large quantity of the surplus products of these States is consumed in way-markets. We see now, that, since railroads carry two thirds of this immense export, they represent nearly or quite the same proportion of the capacity of those States to raise any surplus, and therefore two-thirds of the profit made upon it. If we now consider the question of the profits of agriculture, the case becomes still stronger. The actual cash value of the products carried to market from these five States (that is, the sur-

* Includes wheat, rye, corn, oats, barley and buckwheat.
†Edward D. Mansfield.

plus) is two hundred millions of dollars, and it is safe to say that one-half this sum is due to the influence of railroads. There are some interesting facts on this subject, to some of which we will briefly allude. Take, for example, the prices of both products and lands in the interior States, and compare them at different period periods. Forty years ago (1824–'25) the surplus products of Ohio had already accumulated beyond the means of transportation. In consequence of this fact, wheat was sold in the interior countries for 37 cents per bushel, and corn at 10 cents. After the New York canal (Erie) was finished, in 1825, and the Ohio canals several years later, these prices were raised more than fifty per cent.; but when two or three of the main railroad lines were finished in 1852–'53, the rise in prices and the amount carried forward to the eastern markets were even more increased. To show, in some measure, the effect of the improved means of transportation on the value of produce in the interior, we make the following table of prices at Cincinnati at several periods :

| | In 1826.‡ | In 1835. | In 1853. | In 1860. |
|---|---|---|---|---|
| Flour..... | $3 00 per barrel. | $6 00 | $5 50 | $5 60 |
| Corn..... | 0 12 per bushel. | 0 32 | 0 37 | 0 48 |
| Hogs..... | 2 00 per cwt. | 3 12 | 4 00 | 6 20 |
| Lard..... | 0 05 per pound. | 0 08 | 0 08½ | 0 11 |

We find that in 1860 the price of flour was nearly double that of 1862; the price of corn nearly four times as much; the price of hogs three times as much, and the price of lard double. From 1835 to 1850, (when the railroads were completed,) under the influence of railroad competition with canals the price of corn advanced 50 per cent., and that of hogs 100 per cent. Perhaps no article can be selected which furnish a more complete test of the value and profits of farming in the States of the northwest than that of these staples, corn and hogs.

But there is another respect in which the influence of railroads is almost as favorable to agriculture as that of cheapening the transportation of produce. It is that of cheapening the transportation, and therefore reducing the prices of foreign articles and eastern manufactures consumed by the farmers of the interior. We need not adduce tables to illustrate this; for it is quite obvious and well known that this has been the effect, though perhaps not to so great an extent as the reverse, in the case of produce. In 1839–'40 sugar was just the same price as in 1857 and 1858; but the average price of coffee from 1833 to 1838 was three cents higher than it was from 1853 to 1860. On the whole, the prices of articles carried from the east to the were diminished, while those from the west to the east were increased. Again, the influence of railroads on the value of farming lands is too great and striking not to have been noticed by all intelligent persons. We have, however, some remarkable instances of the specific effect of certain railroads; we have, for example, the immediate effect produced on the lands of Illinois by the Illinois Central railroad. That company received from the government a large body of land at a time when the governoient could not sell it at a dollar and a quarter ($1 25) per acre. Since then the company has constructed its road and sold a large part of those lands at an average of $11 per acre, and the greater part of the lands of Illinois is fully worth that. Notwithstanding the rapid growth of population, the larger part of this advance is due to railroads. The following table shows the advance (by the census tables) of the cash value of farms in the five States mentioned in the ten years from 1850 to 1860 :

| | 1850. | 1860. |
|---|---|---|
| Ohio..... | $358,758,602 | $666,564,171 |
| Illinois..... | 96,133,290 | 432,531,072 |
| Indiana..... | 139,385,173 | 344,902,776 |
| Michigan..... | 51,872,446 | 163,279,087 |
| Wisconsin..... | 28,528,563 | 131,117,082 |
| Aggregate.. | $671,678,075 | $1,738,394,188 |

Increase in ten (10) years.....$1,066,716,113

It is not too much to say that one-half this increase has been caused by railroads, for we experience already the impossibility of conveying off the surplus products of the interior with our railroads. Putting the increase of value due to railroads at a little more than one-third, we have four hundred millions of dollars added to the cash value of farms in these five States by the construction of railroads. This fact will be manifest if it is considered that the best lands of Illinois were worth but a dollar and a quarter per acre prior to the construction of railroads, and are now worth twenty dollars.

We need not pursue this subject farther. If the effect on the central western States has been so great, it is still greater in the new States which lie beyond the Mississippi. They are still further from market, and will be enriched in a greater ratio by the facilities of transportation. Indeed, railroads are the only means by which the distant parts of this country could have been commercially united, and thus the railroad has become a mighty means of WEALTH, UNITY and STABILITY.

## STATISTICS AND ACCOUNT

### OF MACHINERY, FOR CULTIVATING, REAPING AND MOWING GRAIN AND GRASS.

The following very interesting account of Reaping and Mowing Machinery is from the Introduction to the Statistices of Agriculture, proposed by the Census Bureau.

The nature of our climate, the character of our crops, the scarcity of labor, and the extent of our agricultural operations, all conspire to increase the introduction and use of these and all other implements and machines that will expedite the labors of the farm.

It is difficult to conceive that American agriculture could have attained its present condition had the invention of reaping and mowing machines been delayed thirty years. The extent to which they are already used is enormous.

The editor of the *Genessee Farmer*, Rochester, N. Y., has collected directly from the manufacturers the following statistics of the number of reaping and mowing machines made by a few of the leading firms engaged in this important branch subsequent to the returns of the census in 1860.

C. Aultman & Co., Canton, Ohio, made last year (1863) 3,100 "Buckeye" mowing and reaping machines, and this year (1864) 6,000 of the same machines.

Bomberger, Wight & Co., of Dayton, Ohio, have made 1,250 "Ohio Chief" reapers; and Rufus Dutton, who formerly mannfactured the same machine, bas made 3,156, making 4,306 in all.

Of the "Manny" reaping and mowing machine there have been manufactured in the State of Illinois, up to 1863, about *forty thousand*. In 1864 there have been made of the same machines in Rockford, Illinois, 10,500.

Messrs Adriance, Platt & Co., of Poughkeepsie, New York, have also made 2,500 "Manny" machines for the New England States. The same parties have also manufactured 1,100 "Buckeye" machines for the New England States, New Jersey, &c.

S. M. Osborne & Co., of Auburn, New York, have made 15,000 of "Kirby's" mower and reaper. The Buffalo Agricultural Machine Works have also made 7,000, and other parties have made 5,000, making 27,000 of these machines that have been manufactured in the United States.

Messrs. Seymour, Morgan & Allen, of Brockport, New York, have made 7,200 of their "New Yorker" and other machines. Messrs. Warder & Childs, of Springfield, Ohio, also manufacture the same machine, and have made about 9,000.

The Messrs. McCormick Brotbers have manufactured at their establishment in Chicago over 55,000 of their celebrated reaper—6,000 in 1864.

The establishment of Mr. R. L. Howard, of Buffalo, New York, has manufactured 20,000 of the "Ketchum" mowing machines, and 5,000 reapers and mowers combined, and 3,500 of the "Howard harvesters."

Mr. Walter A. Wood, of Hoosick Falls, New York, has made over 30,000 reaping and mowing machines. In 1858 Mr. Wood sent an agent to England with fifty; the next year he sent two hundred and fifty machines and since then his sales in great Britain and on the continent of Europe have averaged over 1,000 per annum.

It thus appears that the manufacturers we have named have made two hundred and fourteen thousand and ninety-four mowers and reapers.

We present these facts, obtained directly

‡ The prices of 1826 are from "Drake and Mansfield's Cincinnati, 1826."

from the manufacturers, that our readers may form some idea of the magnitude of the reaper and mower business. There are other machines manufactured of which we have not ascertained the number, but we may safely conclude that there have been two hundred and fifty thousand reaping and mowing machines manufactured and in use in the United States; the importance of which may be estimated. when it is considered that a common reaper will cut from ten to twelve acres in a day of twelve hours, and a mower eight to ten acres in the same time.

Another valuable implement for facilitating harvesting operations is the hay-unloading fork, with which, by the aid of a horse, a load of hay can be elevated to the stack or mow in a few minutes. Several varieties of these useful little machines are manufactured, and tens of thousands are already in successful use.

The wooden revolving hay-rake, (invented by Moses Pennock, of Pennsylvania, in 1824, and now well known in all parts of the country,) also greatly lesseus the labor of haying. Fine steel toothed rakes leave less hay on the ground, but for general use on American farms this wooden revolving hay-rake is one of the most simple, useful, and efficieat machines yet invented. On large farms, the sulky wire tooth rake is fast superseding all others. They throw the windrow into heaps or bundles of eighty or one hundred pounds each, ready for cocking or loading. A boy and horse can thus rake and bunch twenty acres a day. The hay-fork, or patent pitchfork, is another recent improvement of value.

For *threshing and cleaning grain*, we have machiaes which are confessedly unsurpassed. In our preliminary report we gave an outline of the progress of iavention ia this class of implements.

Nearly all threshing-machines now ia use have an apparatus for separating the grain from the straw and chaff, and carrying the straw up on to the stack. This simple apparatus is now so common that it attracts no notice, except from the English or continental visitor, to whom it is a novelty. Many machines have also an apparatus for bagging the grain when clean.

The English threshing-machines, especially those drawn by steam, have a much more finished appearance, but for simplicity and efficiency they are in no way superior to those of American manufacture. In fact, wherever the American threshing-machines have come into direct competition with those of British and European construction, the American machines have proved superior.

---

—The earnings of the Chicago and North-Western Railway Company for the last week in April were, 1865, $149,637 48; 1864, $134,773 84. Increase $14,863 64.

## MICHIAN SOUTHERN AND NORTHERN INDIANA RAILROAD.

The following is a comparative statement of the earnings and expenses of this road for the fiscal years eadiag March 1, 1864 and 1865:

| Earnings: | 1864. | 1865. |
|---|---|---|
| From freight | $2,016 850 79 | $1,242,972 10 |
| " passengers | 1,244,1.9 25 | 1,375 091 50 |
| " mails | 63 514 58 | 53,843 75 |
| " express | 41.829 36 | 74,385 56 |
| " rents | 17,868 50 | 17 383 66 |
| " all other sources | 10.101 75 | 25,849 16 |
| | $3,384,294 23 | $4,289,465 73 |
| Expenses, viz: | | |
| Repairs of roadway | $482.334 76 | $762,986 38 |
| " buildings | 62,983 89 | 129 809 78 |
| " engines | 1 0,803 61 | 1:9 351 77 |
| " cars | 163,136 65 | 163,783 34 |
| " tools & machinery | 27.608 29 | 48,531 63 |
| " & supplies telegraph | 5,421 65 | 6,625 79 |
| Fuel consumed | 171,103 62 | 241,480 96 |
| Oil and waste | 43,104 65 | 68,302 41 |
| Gen'l Superintendent | 28,400 79 | 36 470 26 |
| Agents and Clerks | 86,513 12 | 107,477 06 |
| Foreign agencies | 45,756 94 | 56 678 41 |
| Telegraph operators | 14,417 34 | 22,769 94 |
| Station men | 154 273 93 | 215 961 12 |
| Conductors, etc | 73,824 71 | 91,560 38 |
| Engine and firemen | 104.147 32 | 135.506 47 |
| Switch and flagmen | 14,539 04 | 6,596 6. |
| Supplies | 20,656 92 | 27 407 46 |
| Station services | 13,279 46 | 10,218 14 |
| Law expenses | 2,910 18 | 14.255 25 |
| Loss and damage | 17,229 14 | 14,192 51 |
| New York office | 30,740 91 | 10,480 88 |
| All other expenses | 29,431 46 | 30,5 0 98 |
| | $1,753,516 90 | $2,407 352 17 |
| Net earnings | $1,630,777 33 | $1,881,113 56 |

Compared with the previous year, the gross earnings show an increase of $905,171 50, with an increase in expeuses of $654,835 27—making the increase in net earning $250,-337 23.

Of the increase of gross earnings, $630,-932 25 is from passengers, $226.121 31 from freight, and $48,058 94 from mails, express, rents, etc.

The proportion of operating expenses to earnings in 1864–'65 was 56.14 per cent.; in 1863–'64, 51.80; in 1862–'63, 48.50.

The amount of net earnings $1,881,113 56, afforded income sufficiently large to meet the payments maturing during the year for rental, taxes, interest on the bonded debt, the year's contribution to the Sinking Fund, and the ten per cent. dividend on the guaranteed stock, in all $1,137,221 69, leaving a surplus of $743,891 87; equal to nearly ten per cent. on the common stock.

Two dividends of 5 per cent. each, less the government tax, were paid in August and February, on the guaranteed stock, and one of 3½ per cent, free of government tax, in August last, on the common stock. The February dividend of 3½ per cent. on the common stock was, in consequence of some contemplated settlements with holders of guaranteed stock requiring time for the reception of their assents, postponed until March 1st, on which date it was paid, thus throwing forward the actual payment into the new fiscal year, though paid from the earnings of the past year. The amount of the two dividends on common stock thus paid is $555,328 40.

The total payments, viz: The year's charge for interest, sinking fund, rental, taxes and two dividends on both classes of stock, amounting to $1,692,550 09, being deducted from the amount of net earnings, viz: $1,-881,113 56, left a net balance of $188,563 47. This balance was expended in necessary additions to the rolling stock and real estate. For these purposes the total amount of expenditure was $530,604 60; and so much of this outlay as was not covered by the above named surplus of net earnings, amounting to $342,-041 13, may be met by any excess of net earnings accruing during the new year, or by sale of bonds as may be hereafter determined to be best for the interests of the Company.

The Company holds unissued and uncancelled $772,500 of its own and the Detroit, Monroe and Toledo Railroad bonds, the whole or any part of which might with propriety be expended for purposes of permanent improvement in additional equipment and real estate, which accession to the property of the Company largely adds to its capacity for doing an increased business beyond even the large business of the past year.

These acquisitions to the property of the Company, are of a permanent character and to be employed in earning the gross income of a series of years hereafter, even more completely than they have been employed in the business of the past year. It would therefore, be eminently proper by the sale of bonds to meet so much of their cost as may not have been covered by the surplus of net earnings of the past year, after paying 7 per cent. on the common stock.

Were the whole amount of the bonds on hand and available sold, the bonded debt would be but $9,346,000, subject to a reduction of $130,000, during the coming year, by the operation of the Sinking Fund, and annually, thereafter, by a gradually increasing amount.

As will be seen by the tabular statement appended, the issue of Sinking Fund Bonds has been increased since the date of the last annual report $310,000. It will be observed, also, that the table of floating liabilities and assets exhibits an item of floating indebtedness for balance due on purchase of guaranteed stock, of $250,078 52.

These items, amounting to $560,078 52, represent the cost of 4,000 shares of guaranteed stock, purchased and withdrawn from issue. This amount is less than would have been the cost of that number of shares of a ten per cent liability, redeemed at a premium that would reduce the rate of interest to the equivalent of a 7 per cent. liability at par.

It was thought advisable to make the exchange of liabilities in this manner, by the purchase of one and sale of the other class of securities, not only because of the gain just named, but because it set at rest, so far as the amount of guaranteed stock purchased is concerned, the vexed question of back dividends on that class of liability, and relieves the Company from any chance of claim or litigation therefor.

Bonds of same class would have been sold to the full amount necessary for paying the entire cost of the purchased shares, had the market for railroad bonds remained in a condition to take more at a premium. The 310 bonds sold. were disposed of at rates varying from 6 to 17 per cent. premium.

Besides the $400,000 of guaranteed stock, the company have redeemed during the year $22,000 of old, overdue bonds, and $34,300 of Detroit, Monroe and Toledo Railroad Stock.

The Commissioners of the Sinking Fund now hold $884,000 of Sinking Fund Bonds in the fund, making the contribution full to March 1st, 1865.

The withdrawal from issue and reduction of stock and bonds during the year, exceed the issues by $157,640, thus reducing the aggregate of those liabilities to that extent. The report says:

Difficult questions have been pressed upon the consideration of the Board, by the claims of a large number of holders of the Guaranteed Stock for back dividends, under the obligations that, it is contended, were created at the period of its original issue, to guarantee

yearly dividends of ten per cent. Under this pretext there is a default of over five years interest on said Guaranteed Stock, prior to the time when the present administration paid the first dividend on said stock.

The persistent demands of strong and influential holders for such accumulated interest, were not responded to by the Board, and suits to recover the back interest were instituted. After careful examination of the intricate questions of liability involved by eminent counsel, it was advised by them that while claims would admit of a line of defence, yet they would lead to a costly and vexatious litigation, calculated to array the different interests in both classes of stock against each other at the risk of great and permanent detriment to all concerned; under such advisement, and after conferring with a large number of stockholders controlling a majority of the stock, it was deemed best to conclude an amicable arrangement of compromise with the Guaranteed Stockholders, and such an agreement as was satisfactory to a large majority of them was effected in the month of January last. The terms thereof are set forth in the following circular issued by the Treasurer on the 12th day of January last:

To the Guaranteed Stockholders:

In order to reconcile conflicting interests in dispute, growing out of a claim made by a portion of the guaranteed stockholders for back dividends, this Company has consented, as a compromise, to accept of a proposition made by parties owning and representing a large majority of the Guaranteed Stock, and by parties who have heretofore brought suit for back dividends against this Company which suits are now on this settlement withdrawn. The Company deems it but just to offer the same terms of settlement to the remaining Stockholders as have been accorded to the majority above named, viz:

In addition to the 5 per cent, cash dividend, payable on the first day of February next, this Company is ready to issue to the Guaranteed Stockholders, common stock at par, to the extent of 30 per cent., of the Guaranteed Stock held by them in full payment of all claims for dividends and interest accruing prior to February 1st, 1863, endorsing such payment upon the face of the Guaranteed Stock Certificates. All common stock so issued prior to the closing of the Common Stock Books on the fourteenth of February proximo, will be entitled to the three and a half per cent. dividend on Common Stock payable first of March, 1865.

Henry Keep, *Treasurer.*

By this measure it was hoped the last important question likely to arise from former embarrassments had passed away; but in a short time certain parties procured a temporary injunction, restraining the Directors from proceeding with the settlement. A hearing in the case has been had before the courts, and their decision is pending which must initiate or conclude a litigation which the Directors, mindful of the trust reposed in them, have sought to avert.

The fiscal year closes with a large, uncollected balance due from the general government and other sources owing to the delay of settlements beyond our control. The easier condition of the Public Treasury and the approach of navigation to relieve freights awaiting movement at Toledo, will enable us soon to realize on such balances.

It will be observed that the value of fuel and supplies on hand has increased $381,647 05 over last year: this arises in part from the higher cost of the articles purchased, but chiefly from an increased stock of fuel and supplies. The past winter, though severe for railway operations, was unusually favorable for bringing out the requisite quantities of wood and ties, and the wants of the road have been abundantly supplied by an accumulation of one year's stock upon the line.

On the 21st day of November last, pursuant to a vote of the stockholders at their last annual meeting authorizing it to be done, the Company entered into an arrangement with the St. Joseph Valley Railroad Company, and the Three Rivers and Schoolcraft Railroad Company, and another party, to lease that portion of our line of four miles running north from White Pigeon to Constantine, and surrendered up to those parties all our interest in the old track and fixtures of the St. Joseph Valley Railroad, on condition that the line of road should be extended within three years and laid with T rail for twenty miles north of Constantine to the town of Schoolcraft.

More than 137 miles of track have been relaid with new, re-rolled or repaired iron, and the bridges, fences, and other road-works have received extensive repairs, all of which has been charged to the cost of operating. The sum of $50,078 18, has been expended in the construction of new depots, warehouses, engine-house, paint-shop and other buildings, and the amount included in operating expenses, although more property chargeable to improvements, as covering the cost of additional property on the line of the Road.

Thorough repairs and improvements have been effected in equipment. New cars have been built to replace the old and worn out stock, and such renewals and repairs have been made to both engines and cars as to add to their value and efficiency for service.

The sum of $21,513 97 has been added to the value of the shops since last year, by the purchase and construction of new tools and valuable machinery, and this increased value has also been charged to operating expenses.

It has been the purpose of the management to fully maintain the condition of the Road and equipment, and the liberal outlay made during the year for these purposes has been sufficient to effect the object.

The assets and floating liabilities of the company March 1, 1865, were as follows:

Assets.

| | |
|---|---|
| Cash in New York | $55,110 99 |
| " Toledo | 63,040 93 |
| Uncollected earnings | 204,608 72 |
| Freight overcharges due | 11,724 06 |
| Bills receivable Toledo | 2,591 24 |
| Individual accounts Toledo | 16,006 07 |
| Interest in Chicago Union stock yards (loans in trust) | 33,333 33 |
| Outside real estate | 15.621 24 |
| Supplies on hand | 660.372 85 |
| | $1,072,409 43 |

Floating Liabilities.

| | |
|---|---|
| Bills payable in New York | $10,000 00 |
| " " Toledo | 25,000 00 |
| Coupons and bonded interest | 24,908 30 |
| Interest on overdue bonds | 3,640 00 |
| Unclaimed dividends | 14,777 40 |
| Unpaid vouchers, including February expenses | 379,473 74 |
| Due individuals at Toledo | 2,024 31 |
| Balance due on purchased guaranteed stock | 250,078 52 |
| | $709,902 27 |

The apportionment of freight and passenger earnings of Main Line and Branches for the year 1864-'65 was as follows:

| | | |
|---|---|---|
| Main Line | $1,233,973 91 | $1,560,458 26 |
| Air Line | 161,778 62 | 291,421 81 |
| Det., Mon. & Toledo | 108,559 37 | 158,731 01 |
| Jackson Branch | 52,578 62 | 33,853 50 |
| Monroe and Adrian | 44,326 10 | 5[illegible],350 05 |
| Three Rivers Branch | ..... | 3,577 30 |
| Military transp | 183,844 87 | ..... |
| Storage | ..... | 36,569 06 |
| | $1,865,061 50 | $2,242,972 19 |
| Previous year | 1,244 129 25 | 2. 16.750 79 |
| Increase | $620,932 25 | $226,121 31 |

The total number of passengers carried was 831,365, of which 135.197 were through, and 696,168 way. Of the through passengers, 101,434 were 1st class, 19.867 2d class, and 13,896 3d class, yielding $766,108 95. Of the way passengers, 694,277 were 1st class, 1 162 2d class, and 729 3d class, yielding $925,-112 68. The number of miles traveled by through passengers was 33,260,246; by way passengers, 28,212,298—total, 61,472,544; an increase, as compared with the previous year, of 254,458 passengers, and of mileage, 19,-742,274. The average mileage of each through passenger was 246; do., way, 40. The average amount received from each through passenger was $4.67; do., way, $1.33. Average rate per mile on through travel 2.38 cents; do., way, 3.28 cents.

The number of tons of through freight moved eastward was 126,631; do., westward, 68,038—total 194,669, yielding $1,064,818 95, or 48.26 per cent. Way freight moved eastward, 228,941; do., westward, 102,891—total, 332,832, yielding $1,141,593 09, or 51.74 per cent. Total tons through and way eastward, 355,572, or 67 4 per cent., yielding $1,432,-644 52; do.. westward, 171,929, or 32.06 per cent., yielding $773,767 52—the total tonnage being 527,501, against 558,979 the previous year; and the revenue therefrom, as above, exclusive of storeage, $2,206,412 04, a gain as compared with the previous year, of $323,-884 56, or 11.35 per cent.

The equipment of the road consists of 96 locomotives; 8 12-wheel and 58 9-wheel passenger cars; 9 second class, 4 emigrant, 22 mail express and baggage, 10 military, 16 drovers', 1 paymaster's, 2 wrecking, 170 stock, 906 box, and 259 platform cars.

Number of miles run by passenger trains, 785,286; by freight trains, 1,151,612; by wood and gravel trains, 250,226—total, 2,187,124, an increase over the previous year of 15,647, Cost of repairs per mile run, 8.66 cents, including the rebuilding of 10 engines, a thorough overhauling of 29 others, and the expenditure of $2,413 99 on one new engine, not yet furnished.

Number of miles operated, 523.82.

Condensed Balance Sheet.

| | | |
|---|---|---|
| Railroad | | $13,619,184 88 |
| Equipment | | 1,644,258 90 |
| Detroit, Monroe & Toledu R. R. | | 1,291.968 13 |
| D., M. & T. stock (at par) | | 406,800 00 |
| Assets as above | $1,072,409 42 | |
| Less liabilities | 709,902 27 | |
| | | 362,507 16 |
| Nominal assets | | 72,655 60 |
| Profit and loss | | 886,940 32 |
| | | $18,284,315 00 |
| Capital stock—common | | $7,536,600 00 |
| " guaranteed | | 2,183,600 00 |
| | | $9,720,200 00 |
| Funded debt, $8,564,115, viz: | | |
| Sinking fund first general mortgage bonds | $5,706,000 | |
| Less held by sinking fund | 884,000 | |
| | | 4,822,000 00 |

| | | |
|---|---|---|
| Second general mortgage bonds | 2,194,500 | 00 |
| Goshen Line bonds | 682,000 | 00 |
| Jackson Branch bonds | 77 000 | 00 |
| Detroit, Mon. & Toledo bonds | 734,000 | 00 |
| Overdue bonds not presented— | | |
| Michigan Southern 1st..$1,000 | | |
| Northern Indiana 1t..... 6,000 | | |
| " Plain..38,000 | | |
| Erie and Kalamazo..... 7,000 | | |
| | 52,000 | 00 |
| Scrip outstanding | 2,615 | 00 |
| | $18.284,315 | 00 |

*President.*—M. L. Sykes, Jr.

*Directors*—Henry Keep, Le Grand Lockwood, Albert Havemeyer, Milton Courtright, D N. Barney, John P. Acker, Hamilton White, Nelson Beardsley, William Keep, William Williams, John S. Barry, Philo Morehous, M. L Sykes, Jr.

*Vice President.*—Albert Havemeyer.

*Treasurer.*—Henry Keep.

*Secretary*—D. P. Barhydt.

*General Superintendent.*—H. H. Porter.

## GRAND TRUNK RAILWAY OF CANADA.

REPORT OF THE DIRECTORS FOR THE HALF-YEAR ENDING DECEMBER 31ST, 1864.

| | | |
|---|---|---|
| Gross receipts of the half-year | £618,238 | |
| Deduct ordinary working expenses... | 369,001 | |
| Net hal. over ordinary working exp.. | £249,236 | |
| Deduct renewals of permanent Way chargeable to Revenue during half-year, viz: | | |
| Grand Trunk Railway [proport'n]... | £40,000 | |
| Buffalo and Lake Huron and Montreal and Champlain [actual]..... | 10,718 | |
| | 50,718 | |
| | £198,518 | |
| Deduct extra amount for renewals specially charged in this half year, as per report | 30,822 | |
| Balance | £167,696 | |
| Deduct loss on American currency,.. | 78,413 | |
| Balance | £89,283 | |

This amount, added to the balance from last year, viz., £6,470 14s 3d, making a total of £95,754 2s 1d, is dealt with as follows:

| | |
|---|---|
| To nominal amount of Postal and Military Revenue carried to separate account | £9,943 |
| Interest, &c. paid on land | 2,303 |
| Do. mortage to Bank of Upper Canada | 4,424 |
| Do. on Loans, Bankers', Balances, Promissory Notes European Exchange. &c | 6,446 |
| Do. British American Land Company's Debentures | 617 |
| Do. Montreal Seminary Debentures.. | 616 |
| Do. Island Pond Debentures | 2.700 |
| Half-yearly instalment on Portland Sinking Fund | 2,312 |
| | £28,361 |
| Atlantic and St. Lawrence Lease [in full] | 30,526 |
| Detroit Line Lease [in full] | 11,250 |
| Montreal and Champlain Company under working arrangement | 10,274 |
| Estimated amount due Buffalo and Lake Huron Company | 7,241 |
| | 59,291 |
| Equipment Bond Interest | 7,084 |
| Balance carried to next account | 18 |
| | £95,754 |

The gross receipts from traffic and all other sources for the half year have heen 618,238*l*., as against 561,428*l*., or an increase of 56,-810*l*., or equal to about 10 per cent., the American currency heing, in each period, taken at par.

The passenger traffic again shows a considerable improvement, the number carried, of all classes, heing 622,446, against 714,983, or an increase of 107,463, or 15 per cent. The amount received was 235,429*l*., against 204,-762*l* The average receipt per passenger was 5s 8d in hoth periods. The total tonnage of freight was 443,934 tons, against 507,447 tons; hut while there is a falling off of about 12 per cent. in quantities, the nominal rates realized show a considerable improvement, viz., 356,319*l*. for 1864, against 328,936*l*. for 1863, or ahout 8-32 per cent increase. The average receipt per ton for 1864 was 16s, as compared with 12s 11d for 1863, hut a larger proportion of through freight paid for in American currency has heen conveyed.

Much of the past half-year has been marked by extreme difficulty. The conseqnences of the depreciation and fluctnation of the American currency have hcen aggravated hy a serious rise in the price of labor and materials on the Company's lines in the United States; all commercial affairs have been injuriously influenced by the long period of dear money in England; and, more recently, the restrictions on intercourse, viz., passports, consular certificates for goods in transit, etc., adopted hy the Government of Washington, have added a new and more serious cause of embarrassment. This latter difficulty has especially affected credit. Thus all Canadian securities have largely and unduly declined in price. Payments due to the Company have heen less promptly made, and banking accommodation in like manner has been restricted. At the same time the proportion of the Company's receipts in American funds has considerably augmented—the rates charged to the puhlic remaining in a great measure stationary.

It is true that these causes of embarrassment are temporary; hut, in the face of tbem, the Directors have been compelled to suspend the operation of making use of the American funds for the purchase of Portland Bonds, and to restrict tbc "Renewal suspense account," debiting 30,821*l*., chargeable to suspense, direct to revenue in tbese accounts. It would have been impossible even at a great sacrifice in price, to dispose of securities held hy the Company sufficient to enahle them to provide money for these operations; and the Directors have determined to recommend the holders of Preferencc Bonds to exercise a forbearancc neccssary under the circumstances, and to make use of the powers of the Act of 1862, under which Bonds for the amount of the interest due are given instead of cash.

The hond and shareholders will remember that the Board approved in 1862 Mr. Watkin's report, recommending that the renewals of permanent way should be charged to revenue as they accrued, in order to avoid raising more capital until the relations between the Company and the Government and the people of Canada became more satisfactory. Snhsequently the Company's traffic having largely increased, and its credit having improved, it was decided to anticipate the period for the renewal and improvement of considerable sections of the linc, and after charging 70,000*l* a year to revenue, to debit the remainder to a suspense account, to he gradually paid out of working expenses over a short period of years.

This operation required the temporary provision of so much capital. Capital also was required for the increase of the company's stock of engines and cars, for improvement of stations, and for the other necessities of an increasing business. Then, again, as the company's business augmented, so must the working capital, absorbed in credits to customers and in stores on hand. As has been often observed, the company has never had the advantage of a real working capital.

This question of the issue of more capitnl, and the other question of the American currency, have been invariably reported to the hond and shareholders as matters beyond the control of the Bonrd, and depending upon those political events hy which the credit of the company has heen and must, while they continue, he injuriously affected. If the securities held hy the company he not now realized, net revenue must for the time, as far as may be, supply the deficiency. And if in consequence, the surplus American funds can not be absorbed as proposed in the purchase of Portland bonds, an enlarged and otherwise needless loss on American currency must for the time be horne. The Board therefore would he merely inviting future derangement if they failed to recommend a firm and prudent course at the present moment. That course, as it seems to them, involves, 1st, the retention of all securities held hy the company, beyond those already pledged for advance, till the political horizon is more clear; 2d, the temporary suspension, as far as possihle, of all outlay on capital account, and of debits to suspense account for relaying; and 3d, the capitalization, in lien of the cash payment, of the preference bonds and stock interest. With a full conviction of the responsibility, the directors recommend this prudent policy.

It is gratifying to know that the special outlay made at the cost of capital and of income since 1861 has resulted in a large and decided improvement in the property of the company. The road is greatly improved, and the capacity of the line for earning money has been much augmented. There has heen expended out of rvenue and capital, hetween the 31st December, 1861, and 31st December, 1864, no less than—

| | |
|---|---|
| On renewals | £355,642 |
| On improvements of the road | 35,122 |
| On new engines, cars, & other plant | 150,849 |
| On new sidings, stations, and other expenditure on capital account... | 98,062 |
| | £639,675 |
| The value of the stock of stores on the 30th June, 1861, were. | £177'584 |
| And on the 31st Dec., 1864. | 270,221 |
| Giving an excess (which is simply so much more added to the property of the company) of | £92,637 |
| Making a general total of | £732,312 |

During the same period of four years the total net earnings have been £743,419, or after deducting loss on American currency charged in the accounts, £624,713. Of this net revenue, £332,647 has heen paid for interest on that part of the capital represented hy lands on rent, or on mortgage, and hy the leased lines; £7,084 for interest on the equip-

ment mortgage bonds; and £206,994 to the 1st, 2d, and 3d preference bond and stockholders.

The cost renewals on the United States sections of the railways of the company (210 miles) has much increased, and the scarcity of labor and materials has again been severely felt; in fact, Canadian labor and English materials have had to be largely used. The following certificate shows that the executive have been able, nevertheless, to maintain the Atlantic and St. Lawrence section (150 miles) in satisfactory condition:

OFFICE OF THE R R COMMISSIONERS,
Portland, Dec. 10, 1864.

The undersigned, Railroad Commissioners for the State of Maine, herchy certify that they have made the annual examination of that portion of the Atlantic and St. Lawrence Railroad, which lies within their jurisdiction, and find the same in good condition, and safe for the running of trains.

(Signed) A. W. WILDES.
ALLAN HAINEL.

The Atlantic and St. Lawrence and Detroit and Port Huron (leased lines,) interest and dividend, and the interest on the equipment mortgage bonds will be paid in cash in regular course.

The bills for arrangements with the Buffalo and Lake Huron, and Ottawa and Prescott Companies, are still before the Canadian Parliament, but by the day of meeting the Board will probably be able to report the result. These bills contain clauses under which they are to be submitted to the bond and shareholders for final sanction. Acting on the advise of their colleagues in Canada, the Board have sanctioned the purchase of the materials and property of the Preston and Berlin Railway at an agreed sum, payable by instalments, out of revenue.

The proposed confederation of the British North American Provinces, now under discussion, is a measure of the deepest moment, and if carried out successfully, must tend to increase the security and value of all Canadian investments. There is good ground of hope also, that friendly negotiations between the Governments of England and the United States, which it is officially stated will be set on foot by Her Majesty's Government, will end in a renewal of the Reciprocity Treaty. Again, if the confederation proceeds, the Intercolonial Railway will be at once commenced. Thus it is, that in the midst of temporary discouragement, there are features of hope in the early future, which may, even sooner than at present appears possible, restore the progress of the Grand Trunk Railway.

The Directors who retire by rotation are Messrs. Baring, Glyn, Brydges, and Young; and the retiring Auditor in Canada are Messrs. Morland and Taylor, and in England Mr. Newmarch. These gentlemen are eligible, and offer themselves for re election.

On behalf of the Board,
EDWARD W. WATKIN, President.

Since the above report was in type, the Board have learned that the question of the payment for for postal services is about to be decided by the Government Commission appointed to assess the compensation due. A considerable fall in the price of gold has taken place. The system of passports has been abolished, and there appears some probability of an early cessation of hostilities in the United States. It is to be hoped, therefore, that some of the apprehensions heretofore entertained may be soon removed.

Loudon, April 5th, 1865.

The following statement shows the progress of the gross revenue of the company (American currency being taken at par) since 1859:

| | | |
|---|---|---|
| 1859...June | 880 | 233,930 |
| " ...Dec | 880 | 292,939 |
| 1860...June | 978 | 314,811 |
| " ...Dec | 978 | 367,847 |
| 1861...June | 1,090 | 347,110 |
| " ...Dec | 1,090 | 419,469 |
| 1862...June | 1,090 | 382,992 |
| " ...Dec | 1,090 | 439,361 |
| 1863...June | *1,174 | 456,222 |
| " ...Dec | *1,174 | 510,580 |
| 1864...June | *1,174 | 528,301 |
| " ...Dec | *1,335 | 618,238 |

*Including the Champlain Railway and Buffalo and Lake Huron Railway from August last.

## JOURNAL OF RAILROAD LAW.

COMMON CARRIERS.—THEIR RIGHTS AND LIABILITIES AS INSURERS.—CONSTRUCTION OF INSURANCE POLICY.

The late case of The London and Northwestern Railway Company against Glyn was an action by plaintiffs against defendant, as Treasurer of The Globe Insurance Company. The complaint set out at length a policy of insurance against loss and damage by fire, effected with the said insurance company, dated 11th December, 1854, by which the sum of 15,000*l.* was insured on goods, plaintiffs' own and in trust as carriers, in a certain warehouse in the policy named.

The complaint then stated that certain goods of plaintiffs, in trust as carriers, in the said warehouse, had been burnt and destroyed by fire, whereby plaintiffs sustained a loss on the said goods to the amount of 15,000*l.*, and that the said insurance company had not paid or made good the said loss.

The answer averred that plaintiffs did not, by reason of the said burning and destroying by fire, suffer any damage or loss upon the said goods.

Upon these pleadings issue was joined.

At the trial, a verdict was entered for the plaintiffs for the full amount claimed, subject to the opinion of the Court upon a special case, which was substantially as follows:

By the policy of insurance, upon which the action was brought, (a copy of which formed part of the case,) an insurance was, on 11th December, 1854, effected by plaintiffs with The Globe Insurance Company for the sum of 35,000*l.*, 15,000*l.* of which was declared to be "on goods their (plaintiffs') own and in trust as carriers," in a warehouse belonging to plaintiffs, situated at the Camden Town Station of the plaintiffs.

The second condition indorsed on the policy was as follows:

"Goods held in trust or in commission are to be insured as such, otherwise the policy will not extend to cover such property." It was declared in and by the policy that during the continuance of the policy, "the capital stock or fund of the 'insurance' company shall be subject and liable to pay, reinstate or make good at their option, to the 'assured' all damage and loss which the 'assured' shall suffer by fire on the property herein particularized, not exceeding on each item the sum hereinbefore declared to be insured thereon."

And the twelfth condition indorsed was as follows:

"In every case of loss, duly proved, the company will either reinstate the property, or the assured shall receive satisfaction to the amount thereof, without discount or deduction."

The policy continued in force up to and on the 9th of June, 1857, when the warehouse and nearly all the goods then contained in it, were consumed and wholly destroyed by an accidental fire. All claims upon the policy were settled and adjusted, except those in respect of the 15,000*l.* insured on goods, their own and in trust as carriers, in warehouse as before mentioned.

At the time of the happening of the fire, the warehouse contained a large quantity of goods which for the purpose of this case, are to be taken to be goods of plaintiffs, in trust as carriers, within the meaning of the policy. These goods were wholly burnt and destroyed by the fire.

Plaintiffs sought to recover in this action the value of the last mentioned goods. It was agreed that the rights and liabilities of plaintiffs and The Globe Insurance Company should be raised and determined upon two selected items of the said goods, representing two classes into which the whole of the said goods are divisible. And that the claims of plaintiffs against the said insurance company, in respect of the rest of the said goods, shall be adjusted out of Court, on the principles which may be applied by the Court to the said two selected items, respectively.

The argument afterwards turned on one only of the two selected items, the claim as to the other being conceded by the defendant.

Plaintiffs were, from a time prior to 1847, and have ever since continued to be, common carriers of goods by railroad, and as such, have during all that time carried goods over their railroad (among other places,) from London to Edinburgh. The Camden Town Station before mentioned is the terminal goods station of plaintiffs in London. On 9th June, 1857, a package of silk, of the value of 10*l.* and upwards, was received in London by plaintiffs' agents, to be carried by plaintiffs from London to Edinburgh. These silks were contained in one package, and the value and nature thereof were not at the time of the delivery thereof to plaintiffs' agents, declared by the person sending or delivering the same, nor was any increased charge, or agreement to pay the, same, accepted by the person receiving subh package.

This parcel was deposited by plaintiffs' agents in warehouse preparatory to its being despatched to its destination, and remained there until it was burnt and destroyed by the fire.

Plaintiffs agents, after the fire and before this action, with the authority and on behalf of plaintiffs, paid the consignee of the said silks part of the value thereof, which was accepted by the latter in discharge of his claim against plaintiffs in respect of the said silks.

The Court was to have power to draw all inferences of fact.

The only question raised upon the argument was, whether having regard to the provisions of the carriers' act, plaintiffs were entitled to recover the value of the silks, or the amount so paid in respect of them as aforesaid.

If the Court should be of opinion that plaintiffs were entitled to recover in respect of one of the selected items, being the one in which the claim was not conceded by the defendant, the verdict for plaintiffs was to stand, subject to the adjustment of the amount, as before mentioned in accordance with the principles laid down by the Court.

If the Court should be of opinion that

plaintiffs were not entitled to recover in respect of the one of said selected items, (the claim of which was not conceded by the defendant,) the virdict entered for plaintiffs was to be vacated, and a verdict entered for defendant.

WIGHTMAN, J.—The question in this case is, whether the plaintiffs are entitled under this policy, to recover more than their own particular interest in the goods which they, as carriers, had in the warehouse when it was burnt? I think that they are, and that they ought to recover the full value of the goods. They must, in my opinion, be considered as having insured the goods, which they held in trust as carriers for the benefit of the owners, for whom they will hold the amount recovered, as trustees, after deducting what is due in respect of their own charges upon the goods. It is not contended that there is anything illegal in this policy. The plaintiffs are clearly entitled to recover something, the only question is, how much. Now, when the terms of the policy are looked at, it appears that the plaintiffs thereby insure "goods their own and in trust as carriers" in the warehouse. Thus a distinction is drawn between their own goods and goods which, as carriers, they hold for other people; and it appears to me that both classes of goods were meant to be fully covered by the insurance, and that the description of some of the goods as "goods in trust as carriers" was inserted, in compliance with the second condition indorsed on the policy, for the express purpose of protecting the interest of the owner of such goods, as well as the more limited interest of the plaintiffs. It is true that this insurance is in the nature of a voluntary trust undertaken by the plaintiffs, without the knowledge of the *cestui que trust*, the owners of the goods; but it is a trust clearly binding on the plaintiffs in equity, who will hold the amount which they now recover, in the first place for the satisfaction of their own claims, and in the next, as to the residue in trust for the owners. If a different construction was put on such a policy as this, it would be necessary, as my brother Crompton has observed, that several policies should be effected on the same goods, and thus insurance companies would obtain several premiums instead of one in respect of what, to them, is the same risk.

The question is, certainly one of intention; but I have no doubt that the intention was as I have stated. The circumstance that the plaintiffs, in consequence of the non-compliance with the carriers' act, are not liable as carriers, to the owners for the loss of the goods, is not, as it seems to me very material to the present question. In Waters *vs.* The Monarch Insurance Company, (5 E. & B. 870,) the plaintiffs, being warehousemen, and therefore not insurers, were not liable to the owners of the goods which were burnt; but the Court held that that fact did not prevent the insurance company from being liable to the plaintiffs to the amount of the full value of the goods, although the utmost interest that the plaintiffs themselves had in the goods was to the extent of their warehouse charges, for which they had a lien upon them. That case is, in principle, undistinguishable from the present, and is conclusive in favor of the plaintiffs.

Judgment for the plaintiffs.

---

☞ The Pennsylvania Railroad Company announces a semi-annual dividend of 5 per cent. free of National and State taxes, payable on the 30th instant.

## NEW-YORK LIFE INSURANCE CO.'S.

EXTRACT FROM SUPERINTENDENT'S ANNUAL REPORT.

The following New-York State Life Insurance Companies are now engaged in the transaction of business under charters granted by our Legislature, either by special or general acts:

| NAME OF COMPANY. | CAPITAL. |
|---|---|
| *Special Charters.* | |
| N. Y. Life Insurance & Trust Co. | $1,000,000 |
| New York Life Insurance Co. | No. Capital |
| Mutual Life Insurance Company. | " |
| Organized under the General Act of 1849. (Chap. 308. | |
| United States Life Insurance Co. | $100,000 |
| Manhattan Life Insurance Company. | 100,000 |
| Knickerbocker Life Insurance Co. | 100,000 |
| Organized under the General Act of 1853. (Chap. 463) | |
| Equitable Life Assurance Society of the U. S. | $100,000 |
| Guardian Life Insurance Company. | 125,000 |
| Washington Life Insurance Co. | 125,000 |
| Home Life Insurance Company. | 125,000 |
| Germania Life Insurance Company | 200,000 |
| Security Life Insurance & Annuity Company | 110,000 |
| North America Life Insurance Co. | 100,000 |

The New-York Life Insurance Company was incorporated before the Mutual Life, but did not issue any life policies until more than two years latter than the latter Company.

The New York Life Insurance and Trust Company, although the oldest organization in the State, had outstanding on December 31st, 1863, only one hundred and ninety-three policies for the whole term of life, insuring $633,150, and forty-six short-term policies, insuring $124,000; and only eight new policies were issued during the year 1862, insuring $17.000. The Company is strictly proprietary, giving no dividends to policy-holders, so that, although offering the security of the largest stock capital of any company, its life business is almost nominal, and it can hardly be regarded as one of our existing Life Insurance Companies in active operation. Excluding this Trust Company, still leaves twelve companies in full and efficient operation, which have policies in force, excluding annuities, ranging from fifteen thousand and forty-four in number, insuring $52,615,656, (Mutual Life Insurance Company,) to eight hundred and forty in number, insuring $2,088,350, (North-America Life Insurance Company,) as per the following table:

POLICIES IN FORCE.

| NAME OF COMAANY. | NO. | AMOUNT. | GROSS ASSETS. |
|---|---|---|---|
| Mutual | 15,044 | $52,615,656 00 | $10 611 14- 98 |
| New-York | 9 949 | 26.191 426 45 | 2.705.666 74 |
| Manhattan | 5,206 | 17.943 3-1 00 | 1 590,587 23 |
| Equitable | 3,264 | 9,260,450 00 | 584 713 51 |
| United States | 3 631 | 8,476.027 0 | 1,057,685 10 |
| Home | 3,423 | 7,165,450 00 | 418 20 23 |
| Germania | 3,040 | 5,020,501 65 | 335 342 13 |
| Knickerbocker | 1,556 | 3 905,813 00 | 394,309 83 |
| Washington | 1.057 | 2,945,800 00 | 267 462 79 |
| Guardian | 1,577 | 2,914.>22 00 | 210,266 44 |
| Security | 1,0 5 | 2.2 8,600 00 | 150,192 31 |
| North-America | 840 | 2.088,350 00 | 160,8.3 12 |
| N. Y. Life & Trust | 239 | 757,150 00 | 1,845,848 50 |
| Aggregate | 49,631 | $140,628 427 10 | $20 2 2,505 83 |

No new Life Insurance Company was organized during the year 1863; the year 1864 will, however, probably record the incorporation of the largest number ever organized in this State during any one year. Considering the vast number of insurable lives in the United States which are uninsured, there is undeveloped business enough for many more sound organizations, if placed under reliable and honest management.—*Stockholder.*

☞ The Aspinwall steamer brings advices of the negotiations of a new and profitable contract by the Panama Railroad Co. with the United States of Columbia. The company for a perpetual ownership of the road and various new privileges, pays a bonus of $500,000 in cash and issues $18,000 shares of stock to the government *not transferable.* Under this arrangement the stock will stand as follows:

| | |
|---|---|
| Present issue | $5,000,000 |
| Bonus to Colnmbinn Government | 1,800,000 |
| Total cost | $1,000,000 |

The following are the principal points in the contract between the Panama Railroad Company and T. Cuenda, Secretary of the Treasury of the United States of Columbin, as approved by President Murillo, on the 22d of March, and to be afterward laid before Congress for its sanction; the contract entirely supersedes that of April 15, 1850:

ART 1. The government concedes to the company the entire and perpetual ownership of the railroad and all its appurtenances.

ART 2. No persons or company shall have the right to construct a railroad or canal within 150,000 metres on either side of the Panama railroad.

ART. 3. The company agrees, 1st, to pay to the government the sum of $500.000. 2d, to issue in addition to the 50,000 shares that now form the capital of the company, 18,000 shares of $100 each in favor of the government. These shares are not to be transferable, and give no right to the government to vote as a shareholder. The government is to receive 28 8 17 per cent. of the dividends as its proportion, and to have the right of appointing one of the directors. 3d, to prolong the line on the Pacific side to the islands of Naos, Culebra, Perico and Flamenco, or to some other point where there are at least 8 metres of water at low tide.

ART. 4. The company has to permit the opening of a canal beiween the Gulf of Caledonia and San Miguel, notwithstanding Article 2.

ART. 5. The company has the right to construct any kind of road within the limits named in Article 2.

ART. 8. The Company may give to the existing line of railroad any direction that may be decided more favorable than the present.

ART. 9. The government conceded to the company the necessary lands required for the line, ports, buildings, wharves, &c., if they belong to the government.

ART. 10. Also 54,000 hectares of government land in the State of Panama, gratis and forever, which may be extended to 96,000 hectares, with liberty to select them whenever the company pleases.

ART. 13. The company may get all the land belonging to private persons which they want for a prolongation or alteration of the line, or for a double track, after a valuation has been made and an indemnification been paid to the owner.

ART. 19. The company agrees to transport the government mail gratis, as also

ART 21. The troops, armaments, &c., for the government's service, and its employees; also to charge for the transportation of the products of the Republic, 10 per cent. less than for the same from other countries, in exchange for which agreement the company shall not be required to pay any government, State, or Municipal taxes.

ART. 32. The company renounces all right to make claims for the damages on account of the out break of the 15th April, 1856.

## Y. N. JOINT-STOCK FIRE INSURANCE COMPANIES.

We extract the following from the Fifth Annual Report of the Superintendent of the Insurance Department, Mr. Barnes:

These corporations are now more numerous and possess a larger amount of assets than ever before in our State history. One hundred and one companies filed annual statements in this department for the year ending December 31st, 1863, representing $23,632,860 capital, and $29,269,422 95 net assets.

During the month of January, 1864, two new companies have been organized, one with a capital of $1,000,000, and the other with a capital of $200,000; and the Adriatic has increased its capital $150,000. The increase of capital of the Columbia, $300,000, was included in the return for December 31st, although the capital was not legally increased according to the statute, until the 15th day of January ult. The capital of the Germania Fire was increased $300,000 at the end of the year, which is not included in their last statement. The Superintendent has been informed that the Citizens' Fire Insurance Company, under the provisions of a special act, (Chap. 223, Laws of 1858,) has also increased its capital during the month of January last, in the sum of $150,000; but no official evidence of such increase has been filed in this Department. Assuming the regularity of this addition to the capital of the Citizens', the joint-stock fire insurance capital of New York companies, on the first of March, 1864, amounts to the sum of $25,432,860.

The following companies have been organized since the date of the last report, (March 1st, 1863.) and the following additions have been made to the capitals of old companies:

NEW COMPANIES.

| NAME. | CAPITAL. |
|---|---|
| Croton Fire Insurance Co., N. Y. | $200,000 |
| International Fire " " | 1,000,000 |
| Sterling " " " | 200,000 |
| Aggregate | $1,400,000 |

INCREASE OF THE CAPITALS OF OLD COMPANIES.

| | |
|---|---|
| Corn Exchange Insurance Co., N. Y. | $200,000 |
| Hanover Fire Insurance Co., " | 200,000 |
| Republic Fire Insurance Co., " | 150,000 |
| North American Fire Ins. Co., " | 250,000 |
| Western Insurance Co., Buffalo | 100,000 |
| Albany City Fire Ins. Co., Albany | 100,000 |
| Germania Fire Ins. Co., N. Y. | 300,000 |
| Arctic Fire Insurance Co., " | 250,000 |
| Home Insurance Co., " | 1,000.000 |
| Adriatic Fire Ins. Co., " | 150,000 |
| Columbia Fire Ins. Co., " | 300,000 |
| | $3,000,000 |

On the twenty-seventh day of February last the Niagara Fire Insurance Company filed an amended charter, consent of stockholders and other documents in this Department, for the purpose of increasing its capital stock from $200,000 to $500,000; the further steps necessary to complete this increase have not as yet been taken by the company.

The organization of a fire insurance company, with a capital of $1,000,000, and the increase of the capital of an existing company to the amount of $1,000,000, mark the dawn of a new era in the history of fire insurance underwriting in this country. These events may well be regarded as of national importance. The whole million of dollars constituting the increased capital of the Home Insurance Company was, with equal boldness, sagacity and patriotism, invested in the "five-twenty" six per cent stocks of the United States at par, and the increased capital of the Germania, and a large portion of the increase of other companies, and of the original capital of the International, was invested in the same manner.

If our present rate of progress continues many years, it is evident that the capitals and reserves of American companies will soon exceed those of any other country, and the time is not far distant when, with the permission of foreign powers, the name of American companies, fire, marine and life, will probably grow familiar to their ears in the same manner that we have become familiarized with the names of the Eagle, the Royal, the Liverpool and London, and otther foreign corporations.

## MONETARY AND COMMERCIAL.

There is another heavy fall in gold. In the last two weeke, gold has fallen from 145 to 131. Considering that the margin for falling is continually narrowing, this is a heavy fall, for so short a time. This seems to puzzle operators and the public not a little. On the one hand, there is no good reason why gold should he more than 5 per cent. above paper, if that. The legal tender notes of the government are not only convenient money, but they pay all debts. These two purposes of exchange and the payment of debts are all the uses of money, *within this country.* There is, however, a *temporary* demand for gold, in the payment of certain home duties on foreign merchandise. As the government is continually paying out gold for interest on its bonds, the gold is soon returned back. It is evident, then, that the only real demand for gold is to make foreign exchanges, that is, to export when the balance is gained. But it is alleged that the imports of foreign goods will increase; and consequently the demand for gold to pay for them will increase. There is some reason for this, on the fact that importations of foreign goods have been scant for the last four monthr; and it is quite likely will be increased during the summer. This is the view taken by the *Cincinnati Gazette*, which says:

"The imports at New York last week were $4,770 83, and the exports, exclusive of specie, $1,310,302. The exports of specie were $587,848. The imports of foreign goods are increasing and the exports of domestic produce are falling off largely. This means a resumption of specie exports, on a considerable scale, and higher prices for gold. We shall undouhtedly have a continuance of large imports. The scarcity of many kinds of foreign good, and the low price of gold, are circumstances favorable to this result. Unless there should be a continued heavy outward movement of securities, we do not see how shipments of coin are to be avoided. Cotton can not he exported to any extent for some time to come."

There is, however, a much larger supply of cotton in the South, than most persons suppose, and it will soon he ready for export; for the restrictions in trade will soon be taken off and the people anxions to realize money for their cotton. On the whole the *tendency* of gold will be downwards, and it is very likely to fall soon under 20 per cent.

Capital has been gradually increasing and money getting plentier; loans are readily obtainerd at from 8 to 12 per cent. Prices of most articles are falling, and trade generally rapidly tending to a peace hasis. We believe, that in a few weeks more, the trade of the country will be so much increased and so prosperous, that. commercially speaking, the trace of the war will have almost disappeared.

EASTERN SHORE RAILWAY.—A vigorons effort is being made to secure the completion, at an early day, of the branch railway extending from Oxford, in Talbot County, to Smyrna, on the Delaware Railway, about fifty miles distant, thus affording to the Eastern Shore of Maryland a direct railway communication with Philadelphia. General Tench Tilghman is the President of the company.—*Baltimore Sun.*

PACIFIC RAILROAD.—A dispatch dated San Francisco, April 28, states that "the California end of the Pacific Railroad now employs twenty-three hundred laborers, eight hundred of whom are whites and the remainder Chinese. Cars will he running thirty-six miles from Sacramento next week; fifty-four miles of the track will be laid by September. One year from July next it is believed the road will be in operation a distance of eighty-six miles, carrying it well towards the summit of the Sierra Nevada."


MONDAY MORNING, MAY 8,

THE

**Atlantic & Great Western Railway**

WILL COMMENCE RUNNING ONE THROUGH TRAIN between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at 8:00 A. M.; arrive 8:10 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnaii, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

**The Old And Reliable Route.**

**Through to Pittsburg without Change.**

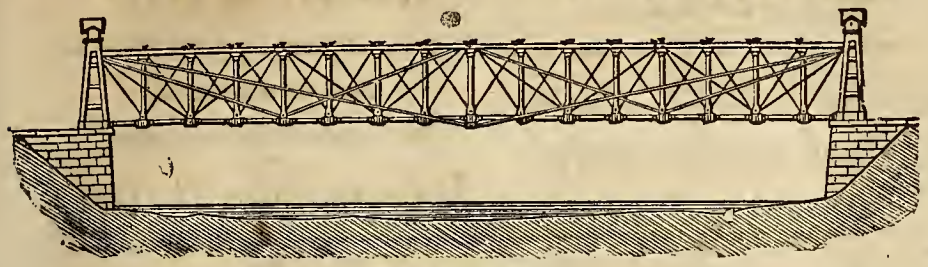
THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

Mar. 4, '63. 1y. Letter Box, 1322. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive En-

419 y 1

---

## KNOX & SHAIN,

**Engineering and Telegraphic**

INSTRUMENT MAKERS,

**PHILADELPHIA**

---

## JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL.

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

**CELEBRATED WHEELS**

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

Manner, at Most Reas[illegible] horteste, and on th Terms.

---

## Manufacturers, Importers & Dealers

—IN—

**RAILROAD, CAR,**

—AND—

**MACHINE SHOP**

**SUPPLIES,**

—AND—

**MACHINERY OF EVERY DESCRIPSION**

**47 West Front Street, Cincinnati.**

PERKIN LIVINGSTON & POST

---

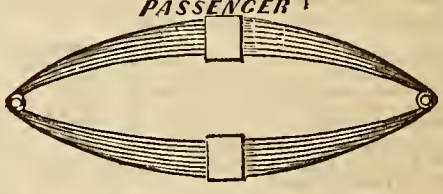
RAILWAY SPRINGS.

**FREIGHT**

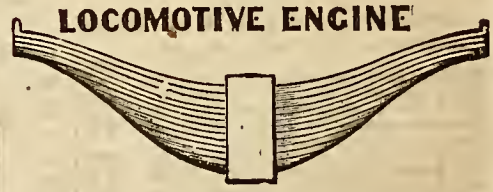




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS,**

Made at his Shops, in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, an one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI, O.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

**W. M. F. HEWSON,**

## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY

W P. SMITH. *Master Transportation. Baltimore*
J H. SULLIVAN, *Gen. Wes. Ag't. Bellaire, O.*
L M COLE, *Gen. Ticket Agent. Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Buses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville. Evansville. St. Louis. Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St, Louis and Cairo Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday eveoing train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street adjoioing the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
General Ticke Agent.

W D. GRISWOLD Gen'l Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis. at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets. good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train. and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD. President.
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

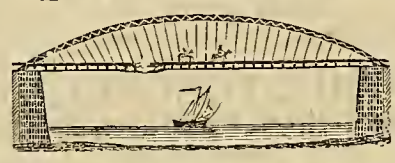
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

8pt. 2

MOSELEY & CO.
BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State. possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTORERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

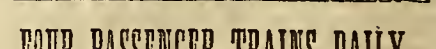
**Cast Iron Gas or Water Pipe**—3 to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M. (Express.

On Sundays, 10.24 P. M.

☞Through connections made for all points East a West

WM. TRARNS Supt

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, MAY 18, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to WRIGHTSON & CO., Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 8:15 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| *Atlantic & Great Western—* | | |
| | 8:00 A. M. | 8:40 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:45 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond, Chicago and Indianapolis | 7:00 A. M. | 9:45 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 10:20 A. M |
| Richmond and Chicago | 7:00 P. M. | 12:35 P. M. |
| Hamilton Accommodation | 11:30 P. M. | 6:45 A. M. |
| do do | 7.00 A. M. | 8:05 A. M. |
| Dayton Accommodation | 2:20 P. M. | 9:45 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Chicago and St. Louis Express | 7:00 A. M. | 12:00 M. |
| Springfield and St. Joe Express | 1:00 P. M. | 5:30 P. M. |
| St. Louis and Chicago Express | 4:00 P. M. | 2:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 4:30 P. M. | 8:35 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:40 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 6:50 A. M. | 1:00 P M. |
| Seymour Accommodation | 3:45 P. M. | 5:00 A. M. |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 7:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 8.00 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:55 A. M. |
| Evening Express | 1:35 P. M. | 6:00 P. M. |

The trains on the Little Miami and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## RAILROADS OF THE SOUTH.

THEIR RECONSTRUCTION.

The reconstruction of the Southern railroads will soon be an important matter of consideration. Whether it be the National Government, the State Government, or the corporations,—somebody will have to repair the Southern roads in order to restore the commerce and intercourse of the country, and on their restoration depends most of the future harmony, if not stability, of the nation. In regard to the National Government, it is absolutely necessary, and will be for years to come, to keep some of the leading lines in good order, that it may transport troops with facility to points in the South, which must be garrisoned, in order to secure the enforcement of the laws and the defense of the country. In regard to the States, several of the States, such as Georgia and Tennessee, either own important lines of railroad or are deeply interested in them. These States, when their governments are re-established, will be obliged to interest themselves in the reconstruction of railroads, or lose largely the property on which their State credit depends. The States of Tennessee and Georgia are large and wealthy States, not overhurdened with debt, and in a very short time will be able to meet all the demands upon them. They will unquestionably repair their roads at the earliest possible day. When all this is done, however, there will remain a large number of railroads, which are owned solely by corporations, and must be completed and repaired by them, or the property will soon become useless. For the last four years, the Southern railroad companies have had little iron, and scarcely any engineers or men available for railroad construction. The cash and the credit of those companies are likewise almost completely gone We presume that, as the result of this state of things, many of the Southern railroad companies will soon be in the market for loans to finish their roads and restore them to usefulness. We think they should be met with great liberality on the part of capitalists, not merely because the full use of these roads is greatly needed (a consideration which is not of itself apt to bring money) but because, in our opinion, such loans will be *safe and profitable.* The reasons we will briefly state. 1. We know enough, even in the few days since the final surrenders, to know that the war is a *finality* for at least one generation. The Southern people have been conquered morally as well as physically. They fully comprehend that it was both a great blunder and a great disaster. It was never intended by the majority of the people; but forced upon them by factious and mercenary demagogues. Its disaster and sufferings have been much greater than they supposed possible. Hence, when they have been compelled to submission, they accept it as a final conclusion, and are willing to take part with all the nation in an honest effort to restore the growth, wealth and prosperity of the nation. Of all this, the railroad system makes no small part. All men in the South will be willing and glad to aid in restoring the railroads. 2. The railroads of the South have generally been profitable; decidedly more so than those in the North. They have been built cheaper; in most cases the States have aided them, and as a general rule they have been well managed. There has been less speculation among them than there has been in the North Western States. They are in a condition, therefore, even when entirely out of order and partially in debt, to give the most ample security and pay a fair rate of interest. Whenever, therefore, the Southern railroads shall ask for aid, Northern capital should be freely furnished; *especially as the profits of Southern commerce must necessarily accrue to Northern merchants.*

The future system of Southern railroads is as follows:

GREAT SOUTHERN SEABOARD LINE.

| | miles. |
|---|---|
| Washington to Fredricksburg | 70 |
| Fredrickshurg to Richmond | 60 |
| " Petersburg | 22 |
| " Weldon | 64 |
| " Wilmington | 162 |
| " Florence | 107 |
| " Charleston | 102 |
| " Augusta | 137 |
| " Atlanta | 171 |
| " West Point | 87 |
| " Montgomery | 88 |
| Aggregate | 1,090 |

From Montgomery a connection is made by steamboats and the Alabama river *via* Mobile with New Orleans. The next great line is that connecting the Ohio river with Charleston, *via* Atlanta, thus:

| | miles. |
|---|---|
| Louisville to Nashville | 185 |
| " Chattanooga | 151 |
| " Atlanta | 138 |
| " Sevannah (*via* Macon) | 293 |
| " Charleston | 104 |
| Aggregate from the Ohio to Charleston | 871 |

The next great line is that connecting the Ohio with New Orleans as follows:

| | miles. |
|---|---|
| Cairo to Columbus *via* Steamboat | 20 |
| Columbus to Jackson (Tennessee) *via* rail | 157 |
| Jackson to Grand Junction | 47 |
| Grand Junction to Canton | 189 |
| Canton to New Orleans | 206 |
| Aggregate | 579 |

All of this is rail but 20 miles.

There are numerous other long lines; but we shall notice only one separately that from Memphis to Charleston, which connects the Mississippi with the Atlantic Seaboard:

| | miles. |
|---|---|
| From Memphis to Chattanooga | 309 |
| " " Atlanta | 138 |
| " " Augusta | 171 |
| " " Charleston | 137 |
| Total | 755 |

This includes part of the roads above mentioned. It is one of the most important rail roads of the entire South; running almost the whole length of Tennessee, traversing the north part of Alabama, and large portions of Georgia and South Carolina. It will be observed that nearly every point on these great lines of road have been visited by the contending armies, and large numbers of bridges destroyed and tracks torn up. The roads may be in running order now, but not in good order. Repairs made merely for war purposes must be temporary and imperfect. One of the first needs of the South is to put all lines of railroad in good condition; so that the internal commerce of the country may be renewed with vigor and celerity.

The whole number of miles of railroad in the South in 1860 was as follows (including Maryland, Delaware, and Missouri):

| | miles. |
|---|---|
| In Virginia | 1,771 |
| N. Carolina | 889 |
| S. Carolina | 988 |
| Georgia | 1,404 |
| Florida | 401 |
| Alabama | 743 |
| Mississippi | 872 |
| Louisiana | 334 |
| Texas | 306 |
| Arkansas | 38 |
| Tennessee | 1,198 |
| Kentucky | 570 |
| Aggregate | 9,514 |

Very little, we believe no, additional miles of railroad have been constructed since the war began. But we see here more than 9,000 miles of railroads, two-thirds of which are half ruined; but nearly all of which are placed in positions to do an immense amount of business, if in proper condition and properly managed. We doubt whether any railroads in the country can be made more profitable than these.

## GRAND RAPIDS AND INDIANA R. R.

At a meeting of the citizens of Cincinnati, held at the Merchants' Exchange, on May 16th, 1865, to take into consideration the means of improving the railroad communication between the city of Cincinnati and the rich lumber and mineral regions of Michigan, Robert Brown, Esq., was called to the Chair, Thos. H. Weasner, Larz Anderson, and W. W. Scarborough were appointed Vice Presidents, and John A. Gano and A. C. Hennerson, Secretaries.

Upon the statement of the objects of the meeting by the President, the following preambles and resolutions were adopted:

*Whereas*, There is a projected line of railroad from Richmond, Ind., by way of Ft. Wayne, Grand Rapids and Traverse Bay, terminating at the Straits of Mackinaw, making a direct railroad communication from Cincinnati to the said Straits of Mackinaw; and

*Whereas*, The completion of said railroad will open to the trade of Cincinnati not only the vast agricultural and lumber resources of Central Michigan, but also the rich mineral wealth of the Upper Peninsula—a region believed to be of more commercial importance to our city than any not already connected by railroad communication; and

*Whereas*, Work to the value of over half a million of dollars has already been done along the said line; and

*Whereas*, The Congress of the United States has granted about one million acres of land, in the State of Michigan and along the line of said road, to aid in the construction of the road from Fort Wayne to the Straits of Mackinaw, known as the Grand Rapids & Indiana Railroad; therefore,

1. *Resolved*, That the amount of work already done, the great value of the land grant made by Congress, and the resources of the country through which the road passes, render the immediate prosecution and speedy completion of this road entirely practicable.

2. *Resolved*, That the construction of said proposed railroad is a matter of great commercial importance to the city of Cincinnati, and in the opinion of this meeting deserves the substantial aid of her citizens; and that for the purpose of a more thorough investigation of the subject, and to arrive at some practical method of rendering such aid to this enterprise, a committee of seven shall be appointed by the Chairman, who shall report to a future meeting.

Joseph Lomax, Esq., President of the Grand Rapids and Indiana Railroad, was then introduced to the meeting by the President, who remarked that the Grand Rapids and Indiana Railroad Company's corporate rights and powers extend from Fort Wayne to the Straits of Mackinaw, embracing a line of 350 miles in length; on which earth-work to the value of $260,000, had been done—and which was equal to the grading of 50 miles. The Company has a land grant of a million acres,—the greater part of which has been out of market nine years; and consists of alternate sections along the line of the road. Since the grant was made, the reserved alternate sections have become settled to such extent that several new counties have since been organized, as well as a considerable number of new townships.—These settlements have so improved the value of these lands that thousands of acres are now worth from $5 to $15 per acre, even without the construction of the Road. The Company's lands are valuable for timber and agricultural purposes. Along the rivers and smaller streams of the Southern part of the grant, there are large bodies of white pine, and in the northern part, Norway pine. There are large bodies of mixed timber lands, the greater part of which is what is generally denominated "hard wood," and one-third or one-quarter of very fine pine timber. These are valuable agricultural lands. Large bodies of these mixed timber lands are between water courses, and there is no means of floating the timber to market. But the construction of this road will bring this timber into market. Timber lands in Indiana, north of Fort Wayne, are now selling at $40 per acre; and the timber is inferior to the pine and mixed timber lands of this grant. On the construction of this road through these lands, they cannot reasonably be estimated lower than $10 per acre. At this price they would bring $10,000,000. Before the war, the entire cost of the road, from Fort Wayne to the Straits, when fully completed, equipped and stocked, could not have been more than five or six millions, and the lands at five or six dollars per acre would pay the entire amount.

The cost of the work and the value of the lands have been estimated by many competent and practical engineers, and all have estimated the value of the lands at more than enough to pay for the construction of the road from Fort Wayne to Mackinaw.

The line runs through the western slope of the lower peninsula for 300 miles, which, as a general thing, in its topographical features, may be stated as a level plateau, a few hundred feet above the waters of the surrounding lakes. There are no mountains, nor heavy and rugged hills. The rivers are mere depressions in the general surface. There are no overflowings of the rivers. The general variations from low to high water is from one to three feet. Grand River is the only exception. Above the rapids it rises seven feet, and below about fourteen.

In the construction of the road-bed, there is no "hard pan" nor stone work to be encountered. There are no reliable stone quarries on line. At first, the culverts and abutments for the bridges will have to be constructed of wood; and after the construction of the road, when necessary, stone may be transported over it either from Fort Wayne or Mackinaw, to replace the wooden structures.

From Fort Wayne to Richmond a company was organized and earth-work done to an amount between two and three hundred thousand dollars, as I am informed. The parties holding that corporation offer to merge it into this by a consolidation of the stock of the two. The special mission of the speaker is to see whether, by so extending its line to Richmond, this Company can there so unite with the Cincinnati interests as to get Cincinnati men to engage in the enterprise. In other words, he wishes to find out whether he can interest Cincinnati gentlemen to assist in making a direct through line from Cincinnati via Richmond, Fort Wayne, Sturgis, Kalamazoo, Grand Rapids, and the Traverse Bay, to the Straits of Mackinaw. The road will run equi-distant between the cities of Chicago and Detroit, and will bring a large amount of general business to the city of Cincinnati.

It is stated that the railroad charges on seasoned lumber from Toledo to this city are $5 per M. It would be brought by this road, at the same rates, from the mills at Grand Rapids to Cincinnati for $7. This would make a large reduction on the present price of lumber here.

In 1859, the mills on the first twenty miles north of Grand Rapids had the capacity to cut 160,000 feet per diam. The line of this road runs directly through the yards of the most of them. This will enable the road to carry the lumber at the very lowest rate.

This pine timber will not last forever. But it is believed that it will last during the life of the present age.

In 1859, barn and fencing boards were sold at the mills for $3.50 per M. Had this road then been in running condition, $7.00 per M. might have been paid for its transportation, and then it would have sold for two or three dollars less than the current prices for such

lumber here. And on the higher grades very much greater would have been the difference in prices. And I have no doubt but the management of the road could be so adjusted as to transport the lumber by rail to Cincinnati at $5.00 per M. It is an article of the greatest magnitude, and it will be the interest of the management to carry it at the lowest paying figure.

The lumber on the line of this road will be urged upon the market regardless of low prices. So much of it stands on rich farm lands that the owners will cut it off to get it out of the way so that they can cultivate the ground on which it stands. This class of mixed timber lands is peculiar to the western slope of the lower peninsula.

After we pass north of Grand Rapids, there are immense quantities of curled and birdseye maple. And there is an unusual supply of very fine and large cherry trees. The finest and best fisheries of the lakes are near the northern terminus of the road. Very large quantities of these fish would be shipped in ice during the warm seasons. The water is cooler, and in the Summer the fishes of this market are much superior to those taken in the southern part of the lake. The whole country is rich in many valuable natural productions and resources, which make up a large amount of miscellaneous articles that constitute the many incidentals which contribute to make up the business of such road.

Also, the fact that the whole line of this road points directly towards the great iron and copper districts of the upper peninsula, is one that adds to its importance. As that interest, which is one of very great extent and magnitude, shall be more and more developed, as it is sure to be, the supplies that will be shipped over this road, for the mining operations, will be a very considerable amount.

As the pine forests shall be exhausted, the agricultural, fishing, mineral, and all other natural resources of the country will be so developed as to contribute a very certain support to the road.

The lands at $6.25 per acre, will produce a sum fully equal to the cost of construction from Fort Wayne to Mackinaw. At $18.00, they amount to more than the entire cost of the road from Richmond to Mackinaw. This shows that the parties who construct the road and hold it will ultimately get it for nothing.

These are the general features of the project. At the present time, it is unnecessary to enter into the subject any more in detail. The question to be determined is this: Is the project of sufficient importance to the city of Cincinnati to justify her citizens in taking active measures to secure its completion? And under the resolutions just adopted by this meeting, it devolves upon the committee appointed to investigate and report upon the subject.

Upon the conclusion of the remarks of Mr. LOMAX, the President announced the following gentlemen as the committee to investigate fully the contemplated project, and report to a future meeting, in accordance with the above resolutions: JOSEPH TORRANCE, WM. H. CLEMENTS, JOHN W. HARTWELL, W. W. SCARBOROUGH, RICHARD SMITH, THOS. H. WEASNER, and M. D. POTTER.

## CIN. HAMILTON AND DAYTON R. R.

The annual meeting of the Directors of the C. H. & D. R. R. took place on Tuesday last, at their office in this city, when the following reports were made. This is one of the best managed roads in the country, and its annua reports are always read with interest.

### DIRECTORS' REPORT.

OFFICE OF THE CIN., HAM. & DAYTON R. R. CO., CINCINNATI, May 16th.

*To the Stockholders:*

GENTLEMEN:—The report of the Secretary and Treasurer shows the gross earnings of the year ending March 31st, 1865, to be $1,241,856 71.

| | |
|---|---|
| The expenses of transportation. | $738,628 92 |
| Damages paid on account of collision of previous year..... | 26,138 54 |
| Fairmount land damage case.... | 7,905 52 |
| Sewerage and bowldering in Cincinnati..... | 17,198 01 |
| | 789,870 99 |
| Leaving for taxes, insurances, interest on bonds and dividends ..... | $451,985 72 |

This amounts has been applied as follows:

| | |
|---|---|
| Taxes, General Government and State ..... | $58,356 14 |
| Insurance..... | 4,074 00 |
| Interest on bonds..... | 112,169 75 |
| Dividends on shares..... | 257,894 72 |
| | $432.494 60 |
| Surplus..... | $19,491 11 |

| | |
|---|---|
| The gross earnings per mile have been..... | $20,697 61 |
| The earnings of the year show an increase over those of the preceding year, of..... | $158,528 24 |
| The number of passengers carried during the year..... | 542,539 |
| The number of passengers carried during the previous year.. | 527,451 |
| Showing an increase of..... | 15,088 |

#### PER CENTAGE OF EXPENSES.

It will be seen that the per centage of transportation expenses has been somewhat increased. This has been owing to the increase in the cost of labor and material, and to the fact that the rates charged for service by the Company have not been correspondingly advanced.

#### ROADBED AND EQUIPMENT.

The condition of the road, with its equipment, is better now than it was at the time of your last annual meeting, and it has been operated for the past year with entire freedom from accident to passengers, and with but little damage to property. The same may be said in reference to the Dayton and Michigan Road, operated by this Company under perpetual lease.

#### NEW STRUCTURES.

During the past year a Passenger Depot has been completed in Cincinnati, at a cost of one hundred and thirty-six thousand dollars. The building will compare favorably with the best in our country, and was a necessity. There has also been completed, in Cincinnati, an additional Freight Depot, extending nearly from Fifth to Sixth streets, 66 by 440 feet, three stories high. The two upper stories are rented to commission merchants, who receive freight brought over the road, which are not removed by consignees within the time allowed. These buildings have been charged to construction account.

#### REAL ESTATE.

The Company have found it necessary, during the past year, to purchase additional real estate, contiguous to their depot grounds in Cincinnati, for the purpose of accomodating the increasing traffic of the road. This was done in accordance with the recommendation of stockholders at their last annual meeting.

#### EXPENDITURES FOR A. & G. W. TRACK AND DEPOTS.

The amount expended in building the broad-gauge track, and in providing additional depot facilities for the business to be derived from the Atlantic & Great Western and from other connecting roads, has been largelyin excess of what was at first expected owing principally to the increased price of labor and material. The amount expended reaches nearly one and a half millions of dollars. Thus far, our Company has derived but little advantage from this expenditure, the A. & G. W. road not having been opened to Cincinnati, for both passenger and freight business, until the 8th day of the present month. It is confidently anticipated that from this time forward the increase of traffic from the A. & G. W. road will make our investment remunerative.

#### SALE OF STOCKS AND BONDS.

To meet the expenditure of so large an amount as required for the construction of the A. & G. W. broad gauge track, and for additional depot grounds and depots, with increased equipment, this Company has disposed of $300,000 of its second mortgage bonds, and $344,000 of its capital stock. The remainder of the funds has chiefly been derived from the sale of bonds, received from the Dayton & Michigan Company in payment of their coupons due to this Company under the lease of that road. It will, therefore, be seen that whilst the sum of nearly one and a half millions of dollars has been expended, the capital stock and bonds, including the stock dividend of stockholders of $500,000, has only been increased $1,114,000.

#### DAYTON AND MICHIGAN ROAD.

The earnings of the Dayton and Michigan road, have exceeded the estimate of one million dollars for the past year by $69,186 97. After payment of transportation expenses, interest on bonds, taxes and insurance, there was left a profit of $120,204 45. This amount has been expended in the permanent improvement of the road, and in retiring $62,000 of their bonds, under the provisions of the mortgage creating the sinking fund of that Company.

The contract between this and the Little Miami and Columbus & Xenia Companies, has been in operation five years, and has proven beneficial to the several parties. Our relations with all other railroad companies continue satisfactory.

Before closing this brief report, it is due to the various officers and employes of the Company, to say that they have discharged their several duties with fidelity.

Respectfully submitted,

By order of the Board of Directors,

S. S. L'HOMMEDIEU, President.

REPORT OF STOCKHOLDERS' COMMITTEE.

*To the Stockholders of the Cincinnati, Hamilton and Dayton Railroad Company.*

GENTLEMEN:—For all necessary information concerning the business operations of the year, and the financial condition of the Company, you are referred to the elaborate reports of the executive officers respectively.

The general duties of your committee have been discharged; the books and accounts of the Company have been under examination; the work-shops have been visited; the entire line of the roads from Cincinnati to Toledo has been traversed, their condition inspected, and a general acquaintance formed with the various interests involved. The facts and suggestions herein presented for your consideration are deemed sufficient for our present report.

CONDITION OF THE ROADS.—The Cincinnati, Hamilton & Dayton Road was never in a better condition for all the purposes of traffic and travel than at present. The construction of the broad gauge track, necessitating new and more substantial cross ties, has rendered the entire road-bed more permanent than ever. The bridges, culverts, depots, station houses, track, and rolling stock, are all in good order furnishing every requisite facility for business. Nothing is hazarded in assertings the entire work to be second, in its character and outfit, to no road in the country.

Of the Dayton and Michigan Road we can not say so much. The unprecedented rains of the season have damaged portions of the road-bed, carrying away a few badly constructed culverts and imperfect defenses, and rendering new structures indispensable.

Much is also to be done in renewal of cross ties decayed, and rails nearly worn out by constant use. These defects, however, relate to only minor portions of the road. Other portions, having been subjected to less external damage, are in better condition than at our last report.

EARNINGS.—It will be seen that the earnings of the C., H. & D. Road for the current year exceed those of the year previous in the sum of one hundred and fifty-eight thousand dollars, while those of the Dayton & Michigan Road have more than realized the apparently extravagant prediction of your committee in our last report—the aggregate sum exceeding one million dollars.

EXPENDITURES.—Large sums of money have been expended during the year. The completion of the Atlantic & Great Western track, at an aggregate cost exceeding greatly the original calculations, the new passenger depot and its equipments, the new freight and express depots, warehouses and workshops, and the purchase of additional grounds for these and similar purposes, have required all the current cash receipts, after paying transportation expenses, taxes, insurance, interest on bonds, and dividends on stock. All these improvements, however, were essential to the future success of the road; and being of the first class in character of performance and utility, and being now paid for, the necessity of their duplication will furnish no grounds of apprehension that prospective dividends will be interfered with from this source.

It is true that the D. & M. Road will, for many years, require large expenditures, and in the estimation of your Committee it should be the settled policy of the C., H. & D. Road, as lessees, to expend the entire net earnings of this road not otherwise appropriated by the terms of the lease, upon the requisite improvements; and in rendering in all its departments, equal to any first-class road. Its present and manifest future business, and the development of the country along its line, seems to dictate this as an indispensable duty.

PROPERTY.—The entire property of the Company consisting of grounds, depots, station houses, workshops, warehouses, machinery, rolling stock, equipment, &c., are all represented in the Company's book under the appropriate heads of "Real Eestate," "Construction" and "Equipment" accounts The original cost of these several species of property having been, through many years, charged to these accounts respectively, and no additions made for supposed appreciated values, nor deductions for presumed depreciations, it is questionable how accurately these accounts represent the real value of the subjects. It is, therefore, the opinion of your committee, and we present it as a recommendation for your approval, that the Board of Directors, should, if they deemed it expedient, during the ensuing year, institute a thorough appraisment in detail of all and every species of property belonging to the Company inventorying the same at its true value, in proper form for your information. This work will, of course, involve the appointment of suitable persons, experts in the various departments, whose judgment and faithfulness will afford hopeful reliability as to the accuracy of their returns.

PROPERTY OF THE D. & M. ROAD.—This Company has already provided largely in the matter of grounds, depots, workshops, &c., for its future necessities. The workshops and engine houses at Lima, and their full complement of machinery and other equipment for the manufacture, repair and profection of its rolling stock, are of great value and properly located, and appear to be well managed. The grounds of the Company at Toledo, fronting, as they do, for more than half a mile along the navigable waters of the Maumee, are unsurpassed for convenience and adaptability, and will afford ample factilities for the future and growing wants of the road. The improvements now in progress at that point give promise of desirable utility.

FUTURE PROSPECTS.—Whether the earnings of these roads for the coming year will reach the large figures of the past may be doubted. The effect upon the entire business of the country incident to a sudden change from a state of war to a condition of peace, must be shared by all. Railroads will probably form no exception to the ruling result. Until a new level is found corresponding to these new relations, there may be a partial decline in the otherwise unceasing activeness of the business world around us. It is believed, however, that even this can not be of long duration. This adjustment once effected, the vast resources of the country, with ample skill and enterprise, and means for their development, will furnish good grounds for confidence that the future earnings will not be unsatisfactory. It is also presumed that there will be a diminution in the expense of working the roads, the coming year, in some degree commensurate with the presumed falling off of receipts.

In all the investigations which your Committee have felt it their duty to make, we have been furnished with every requisite facility by the executive officers of the road, and we, in closing, take pleasure in bearing testimony to their uniform urbanity and fidelity to the important interests entrusted to them.

Respectfully submitted,
GARDNER PHIPPS,
A. M. SEARLES,
WM. GOODMAN. } Com.

CINCINNATI, May 15, 1865.

The following is the Board of Directors of the C., H. & D. R. R. for the ensuing year:

S. S. L'Hommedieu, John F. Hartwell, Geo. H. Hill, John W. Ellis, John Young. W. Beckett, Geo. T. Stedman, Wm. Goodman, A. M. Scarles.

Officers Re-Elected.—S. S. L'Hommedieu, President; John W. Hartwell, Vice-President; Daniel McLaren, General Superintendent; Lewis Williams, Assistant Superintendent; T. H. Short, Secretary and Treasurer.

## PRACTICAL RAILWAY MEMORANDA FOR THE SHOP AND THE TRACK.

### LENGTH, WEIGHT AND MEASURE.

The French standard of length is the metre, which is one ten-millionth of the distance from the equator to the pole; it is equal to 39.37079 inches, or very nearly 3.281 English feet. One mile contains 5.280 feet, or 1,760 yards. The acre contains 43,560 square feet. One mile square contains 640 acres. The circumference of a circle is equal to the diameter multiplied by 3.1416. The area of a circle is equal to the square of the diameter multiplied by 0.7854. The United States standard gallon contains 231 cubic inches; and the United States standard bushel contains 2,150.42 cubic inches. A cubic foot of water weighs 62 5 lbs; a foot of hard wood, green, 62 lbs, air dried, 46 lbs., kiln dried, 40 lbs.; a foot of soft wuod, green, weighs 53 lbs., air dried, 30 lbs., kiln dried, 28 lbs. A cubic foot of cast iron weighs 450 lbs.; of wrought iron, 480 lbs.; coke, 50 to 65 lbs.; coal, 75 to 95 lbs.; sandstone, 140 lbs.; granite, 180 lbs.; brickwork, 95 lbs. No. 1 iron is 5-16 inches thick; No. 3 is 9 32 scant; No. 4 is 1-4 inch; No. 5 is 7-32, and No. 7 is 3-16 inch thick.

*Inches expressed in decimals of a foot.*

| *Inches.* | *Foot.* | *Inches.* | *Foot.* |
|---|---|---|---|
| 1 | .0 33 | 7 | .5833 |
| 2 | .1667 | 8 | .6667 |
| 3 | .2500 | 9 | .7500 |
| 4 | .3333 | 10 | .8333 |
| 5 | .4166 | 11 | .9166 |
| 6 | .5000 | 12 | 1.0000 |

*Fractions of an inch decimally expressed.*

| | | | |
|---|---|---|---|
| 1-16 | .0625 | 9-16 | .5625 |
| 1-8 | .1250 | 4-8 | 6250 |
| 3-16 | .1875 | 11-16 | .6875 |
| 1-4 | 2500 | 3-4 | .7500 |
| 5-16 | .3125 | 13-16 | .8125 |
| 3-8 | .375 | 7-8 | .8750 |
| 7-16 | .4375 | 15-16 | .9375 |
| 1-2 | .5000 | 1 | 1.0000 |

### RAILWAY CURVES.

Railway curves are expressed as being of such a degree of curvature, or of such a radius. The radii corresponding to the various degrees are as below:

| *Angle of deflection in degrees.* | *Radius in feet.* | *Angle of deflection in degrees.* | *Radius in feet.* |
|---|---|---|---|
| ½ | 11, 60 | 4½ | 1.274 |
| 1 | 5.730 | 5 | 1.146 |
| 1¼ | 4.585 | 5½ | 1.042 |
| 1½ | 3.820 | 6 | 955 |
| 1¾ | 3.274 | 6½ | 882 |
| 2 | 2 865 | 7 | 819 |
| 2½ | 2.292 | 7½ | 764 |
| 3 | 1,910 | 8 | 716 |
| 3½ | 1 637 | 8½ | 6 4 |
| 4 | 1,433 | 9 | 636 |

The radius corresponding to any angle is found by dividing 5730x60 by the number of minutes in the angle of deflection. Thus, the radius for a 3¾ deg. curve is—

$$\frac{5730 \times 60}{210} = 1{,}637 \text{ feet.}$$

### ELEVATION FOR THE INTERIOR RAIL.

The less the radius of curvature, and the greater the speed, the greater is the elevation of the outer rail upon a curve.

| Radius of curve of feet being | Elevation of the Outer Rail in inches; the velocity in miles per hour being | | |
|---|---|---|---|
| | 10 | 20 | 30 |
| 500 | 0.57 | 2.83 | 6 56 |
| 1 000 | 0.29 | 1.43 | 3.30 |
| 2,000 | 0.15 | 0.71 | 1.05 |
| 3,000 | 0.10 | 0.47 | 1.10 |
| 4,000 | 0.07 | 0 36 | 0.83 |
| 5,000 | 0.06 | 0 28 | 0.66 |

It is well, in connection with the ordinary rail gauge, to use a clinometer, graduated for different radii of curvature. Any trackman could use such an instrument, and could carry it in his pocket. The proper elevations would thus be maintained undisturbed by the repairs of the road-bed.

### RAILS, CROSS-TIES AND BALLAST.

The sectional area, weight per yard, and weight per mile of rails, are as below:

| Area in inches. | Weight per yard in lbs. | Tons per mile. (2240 lbs.) |
|---|---|---|
| 5 | 50 | 78.5 |
| 6 | 60 | 94 2 |
| 7 | 70 | 109.9 |
| 8 | 80 | 125.6 |
| 9 | 90 | 141.3 |
| 10 | 100 | 157.0 |

The number of 15 feet rails per mile is 704; of 16 feet rails, 660; of 18 feet rails, 587; and of 20 feet rails, 528, allowing nothing for joints.

The number of cross-ties per mile, when they are placed 2 feet apart from centre to centre, is 2641; 2¼ feet apart, 2348; at 2½ feet, 2113; at 2¾ feet, 1929; and at 3 feet apart, 1761.

The number of cubic yards per mile of ballast for different depths and widths of road-bed, is as below:

| Depth of ballast in inches. | Side slopes of ballast being one to one and the width in feet. | | | | | |
|---|---|---|---|---|---|---|
| | 10 | 11 | 12 | 21 | 22 | 23 |
| 12 | 2151 | 2347 | 2543 | 3303 | 4499 | 4694 |
| 18 | 3573 | 3867 | 3961 | 6601 | 6895 | 7188 |
| 24 | 4700 | 5085 | 5477 | 8997 | 9389 | 9780 |
| 30 | 6111 | 6601 | 7090 | 11,491 | 11,980 | 12,469 |

The 10, 11 and 12 feet columns are for a single track; the 21, 22 and 23 feet columns are for a double track.

### FROGS AND SWITCHES.

In laying down a frog, the problem to be solved by the tracklayer is, how far from the heel of the switch rail to place the point of the frog. This distance depends upon the gauge, the angle of the frog, and the movement of the switch rail. Frogs are usually made six inches across the head and three inches of opening at the mouth; with these dimensions, we have the following distances in fect and decimals, the gauge being 4 feet 8½ inches and the switch rail moving 5 inches at the toe:

| Length of Frog in feet. | Distance from toe of switch to point of frog, length of switch rail in feet being | | | | | |
|---|---|---|---|---|---|---|
| | 12 | 14 | 16 | 18 | 20 | 22 |
| 3 | 29.1 | 29.7 | 30.1 | 30 4 | 30.7 | 30 9 |
| 3½ | 33.3 | 34.0 | 34.5 | 35.0 | 35.3 | 35.6 |
| 4 | 37.3 | 38.2 | 38 8 | 39 4 | 39.8 | 40 2 |
| 4½ | 41.1 | 42.2 | 43.0 | 43.7 | 44.3 | 44.7 |
| 5 | 44.8 | 46.1 | 47.1 | 47.9 | 48.5 | 49.1 |
| 5½ | 48 3 | 49.0 | 51.0 | 51.9 | 52.7 | 53.2 |
| 6 | 51.7 | 53.1 | 54 8 | 55 9 | 56.8 | 57.6 |
| 6½ | 55.0 | 56.9 | 58.5 | 59.8 | 60.8 | 61.7 |
| 7 | 58.1 | 60.3 | 62.1 | 63.4 | 64 7 | 65 5 |
| 7½ | 61.2 | 63.6 | 65.6 | 67.2 | 68.5 | 69.6 |

### THE BENDING OF RAILS.

Each rail in a curved track requires to be bent to fit that curve before being laid. This may be done by placing the ends of the rails upon supports, and pounding the rails until a "straight edge" shows the proper amount of curvature to be attained; or by pressure applied to the rail in a straightening or bending machine. The versed sine of curvature at the middle of the rail, for different radii of curvature and for different lengths of rails, are given below:

| Radius of curvature in feet | Versed sines for rails, the length in feet being | | | |
|---|---|---|---|---|
| | 15 | 16 | 18 | 20 |
| 286 | 1 3 16 | 1 5-16 | 1 11-16 | 2 1-16 |
| 301 | 1 1-8 | 1 1-4 | 1 5-8 | 2 |
| 318 | 1 1-16 | 1 3-16 | 1 1-2 | 1 7-8 |
| 337 | 1 | 1 1-8 | 1 7-16 | 1 3-4 |
| 358 | 15-16 | 1 1-16 | 1 3-8 | 1 11 16 |
| 382 | 7-8 | 1 | 1 1-4 | 1 9 16 |
| 409 | 13 16 | 15-16 | 1 3-16 | 1 7-16 |
| 441 | 3-4 | 7-8 | 1 1-8 | 1 3 8 |
| 477 | 11 16 | 13-16 | 1 | 1 1-4 |
| 521 | 5-8 | 3-4 | 15 16 | 1 1-8 |
| 573 | 9-16 | 11-16 | 7-8 | 1 1-16 |
| 636 | 1-2 | 5-8 | 3-4 | 15-16 |
| 716 | 1-2 | 9-16 | 11-16 | 13-16 |
| 818 | 7-16 | 1-2 | 9-16 | 3-4 |
| 955 | 3-8 | 3-8 | 1 2 | 5-8 |
| 1146 | 5-16 | 5-16 | 7-16 | 1-2 |
| 1432 | 1-4 | 1-4 | 5-16 | 7-16 |
| 1910 | 3-16 | 3-16 | 1-4 | 5-16 |
| 2865 | 1-8 | 1-8 | 3 16 | 3-16 |
| 6730 | 1-16 | 1-16 | 1-16 | 1-8 |

The above radii are those corresponding (commencing at the top) to angles of deflection from 10 to 1 degrees. The versed sines are expressed in inches and fractions.

### DIMENSIONS FOR ARCH CULVERTS.

The thickness of a voussoir, or arch stone, depends upon the form and size of the arch and upon the quality of the masonry. For good work, with hammered beds laid in cement, Gauthey gives the following rules for the thickness of voussoirs. For sparn under six feet, the depth should be 13 inches. From 6 to 50 feet spnn, 13 inches plus 1-48th of the span. From 50 to 100 fcet 1-24th of the spans. For over a hundred feet, 1-24th of 100 plus 1-48th of the remainder. These rules give the following:

| Span in feet. | Thickness, in inches. | Span in feet. | Thickness in inches. |
|---|---|---|---|
| 6 | 13 | 25 | 20 |
| 8 | 18 | 30 | 21 |
| 10 | 16 | 35 | 22 |
| 12 | 16 | 40 | 23 |
| 14 | 17 | 45 | 24 |
| 18 | 18 | 50 | 26 |
| 20 | 19 | 60 | 30 |

The thickness of the abutments of an arch depends upon the span and form of the arch, the height of the abutment, and the character of the masonry.

The following figures give the thickness for semi-circular arches from 6 to 50 feet of span; the section of the abutment being rectangular.

| Span in feet. | Height of abutment in feet being | | | |
|---|---|---|---|---|
| | 5 | 8 | 10 | 15 |
| | .0 | 3.0 | 3.3 | 3.5 |
| 8 | .5 | 4.0 | 4 2 | 4.5 |
| 10 | 4.0 | 4.8 | 5.0 | 5 3 |
| 15 | 4.5 | 5.3 | 5.5 | 6. |
| 20 | 5 0 | 5 6 | 6.0 | 7.0 |
| 25 | 5.5 | 6.0 | 6.5 | 7.2 |
| 30 | 6.0 | 7.0 | 8.0 | 8.5 |
| 35 | 6 5 | 7.0 | 8 3 | 9.0 |
| 40 | 7.0 | 7.5 | 8.7 | 9.5 |
| 45 | 7.5 | 8.5 | 9.2 | 10.0 |
| 50 | 8.0 | 9.0 | 10.0 | 11.0 |

For piers supporting trusses not exerting any horizontal thrust, made of good masonry and upon a firm foundation, very little thickness is sufficient. The batter of piers from 10 to 20 feet high, being one twelfth, and from 20 to 50 feet high one twenty-fourth, the following dimensions, all in feet, may be used:

| Span of bridge. | Length of bridge seat. | Width of seat. |
|---|---|---|
| 20 to 40 | 20 | 4.0 |
| 40 to 60 | 20 | 4.5 |
| 60 to 80 | 22 | 6.0 |
| 80 to 100 | 23 | 5.0 |
| 100 to 125 | 23 | 5.5 |
| 125 to 150 | 24 | 6.0 |
| 150 to 200 | 24 | 7.0 |

### TABLES RELATING TO LOCOMOTIVE ENGINES.

The tractive power required to move any load upon a level railway is found by dividing the square of the speed in miles per hour by 171, and to the quotient adding 8, and multiplying the sum by the load in tons.

| Speed in miles per hour. | Tractive power needed, load being | | | |
|---|---|---|---|---|
| | 50 tons. | 75 tons. | 100 tons. | 250 tons. |
| 12 | 442 | 063 | 884 | 2210 |
| 15 | 65 | 698 | 931 | 2328 |
| 20 | 517 | 763 | 1034 | 2585 |
| 25 | 582 | 874 | 1165 | 2912 |
| 30 | 663 | 994 | 1326 | 3315 |

Table showing the tractive power required to overcome grades with different loads.

| Grade in feet per mile. | Load in tons. | | | | |
|---|---|---|---|---|---|
| | 1. | 50. | 75. | 100. | 250. |
| 20 | 8 | 424 | 636 | 848 | 2122 |
| 40 | 10 | 848 | 1272 | 1696 | 4244 |
| 60 | 26 | 1272 | 1910 | 2546 | 6340 |
| 80 | 33 | 1697 | 2545 | 3393 | 8489 |

To find the tractive power needed to overcome any grade, we multiply the load by the rise per mile, and divide the product by 5280, the number of feet in a mile.

Table of factors which, multiplied by the total piston pressure, give the tractive power of the engine in lbs.

| Diameter of Driver. | Stroke in inches. | | | |
|---|---|---|---|---|
| | 18. | 20. | 22. | 24. |
| 4 | 2380 | 2652 | 2918 | 3182 |
| 4½ | 2250 | 2500 | 2750 | 3000 |
| 4⅝ | 2151 | 2390 | 2593 | 2830 |
| 4¾ | 2012 | 2235 | 2459 | 2682 |
| 5 | 1910 | 2122 | 2334 | 2546 |
| 5½ | 1736 | 1939 | 2122 | 2315 |
| 6 | 1591 | 1768 | 1945 | 2122 |

The above are all decimals, and are got by dividing the double stroke by the wheel circumference, both in inches.

Table of piston pressures for different cylinders and different steam pressures.

| Diameter of Cylinder. | Area of poston. | Whole pressure on both pistons, at | | | |
|---|---|---|---|---|---|
| | | 100 lbs. | 110 lbs. | 120 lbs. | 130 lbs. |
| 16 | 201 | 40,120 | 44,242 | 48,204 | 62,062 |
| 18 | 254 | 50,900 | 55,990 | 61,080 | 66,170 |
| 20 | 314 | 62,240 | 00,124 | 75,408 | 81,692 |

Relative volumes of steam under different pressures:

| Steam Pressure. | Relative Volume. | Steam Pressure. | Relative Volume. |
|---|---|---|---|
| 80 | 359 | 120 | 249 |
| 90 | 321 | 130 | 231 |
| 100 | 293 | 140 | 216 |
| 110 | 269 | 150 | 203 |

That is, at a pressure of 100 lbs. per inch, each cubic foot of water will make 293 cubic feet of steam.

Table giving the amount of surface obtained by 100 tubes of different dimensions:

| Length of tube in feet. | Square feet of surface in 100 tubes, diameter of tubes in inches being | | | | |
|---|---|---|---|---|---|
| | 1½ | 1¾ | 2 | 2¼ | 2½ |
| 10 0 | 392 | 457 | 524 | 589 | 655 |
| 10 5 | 411 | 480 | 549 | 618 | 687 |
| 11.0 | 431 | 503 | 576 | 647 | 720 |
| 11.5 | 459 | 526 | 602 | 677 | 753 |
| 12.0 | 471 | 549 | 628 | 705 | 786 |

Table showing the mean pressure in the cylinder, for different per centages of admission, and different initial pressures:

| Initial pressure in lbs. | Mean cylinder pressure cutting off at | | | | |
|---|---|---|---|---|---|
| | ¼ | ⅛ | ½ | ⅔ | ¾ |
| 100 | 54 | 65 | 83 | 93 | 95 |
| 110 | 60 | 72 | 91 | 102 | 105 |
| 120 | 66 | 79 | 99 | 112 | 114 |
| 130 | 72 | 86 | 108 | 121 | 124 |

That is, if we cut off the steam at 50 per cent., which has a pressure at entering of 120 lbs, per inch, the mean pressure throughout the stroke will be 99 lbs.

### EXPANSION OF METALS.

Metals expand by heat, and contract by cold; and in almost all mechanical operations, unless the tendency to expand is allowed to act, very great strains are brought to bear upon the material. The following table shows the amount of expansion for different materials:

| | Expansion per deg. Fah. | Expansion from 32° to 212° |
|---|---|---|
| Iron | .0000067 | .00122 |
| Steel | .0000069 | .00124 |
| Copper | .0000099 | .00171 |
| Zinc | .0000160 | .00294 |
| Tin | .0000120 | .00217 |

Almost all solid bodies expand equally for each degree between freezing and boiling, or from 32 to 212 degrees of Fahrenheit's thermometer. A bar of iron, therefore, which is 12 feet long, by an increase of 60 degrees of temperature becomes 60 x 12 x .0000067—12.0048 feet in length.

## ARCTIC EXPLORATION.

INSULAR PREJUDICES.—THE NEW LINE OF DISCOVERY.

A paper on the Exploration of the North Polar Regions, recently read by Captain Sherard Osborn, before the Royal Geographical Society in London, was remarkable for its omission of any acknowledgment of the discoveries of American explorers. While the explorations of Captain Hall were entirely overlooked by Captain Osborn, his passing reference to Dr. Kane was so inaccurate that it calls for correction. He remarked:

"In 1853 Dr. Kane entered Smith Sound. His expedition was rather the result of private munificence and a generous impulse of individuals, and never in our time has a navigator entered the ice so indifferently prepared for a Polar winter. With only seventeen followers, two of them mutineers, without steam power for his solitary vessel, without proper sledge equipments, without any preserved meats, and a great want of preserved vegetables, only coal enough for twelve months, Dr. Kane's consequent sufferings were only equalled by those of James in Hudson Bay, two hundred years earlier. Enthusiasm and high courage, without proper knowledge and equipments, must, in such service, have led to the distress Dr. Kane and his followers endured, and explains how our sailors, far beyond the haunts of Esquimaux, waxed fat and fastidious, while Dr. Kane's poor followers had to eat the raw meat of animals to avert the ravages of the scurvy, brought on by a poisonous dietary of salt meat."

It is but justice to Mr. Henry Grinnell, whose enlighted liberality enabled Dr. Kane to set out upon his second expedition, to state the real circumstances of the outfit, thus totally misrepresented by Captain Osborn. We know that there was not a wish of Dr. Kane that was not complied with; everything that could be thought of to secure the comfort of his followers was freely provided, and so heavily laden was the little brig when she set sail from this port, that on her way to sea she was considered unsafe, and a large part of her deck load was taken off.

The statement that Dr. Kane had "only seventeen followers, two of them mutineers," is equally untrue. Dr. Kane received about one hundred and fifty applications from persons wishing to volunteer for his expedition, and from this number he selected seventeen—all the brig could accommodate. It should be remembered, too, that Commander McClintock, in his celebrated expedition in the yacht Fox, had but twenty-three companions; while Sir John Ross had only twenty two persons in his expedition in 1829. Captain Hall, who retured in 1863 from a seach for Sir John Franklin—making probably one of the most remarkable explorations in those regions, occupying a period of twenty-two months—had an Esquimaux for his only companion; and besides, was unprovided with a depot of supplies, relying wholly upon hunting the polar bear, walrus and seal; living in snow huts like the natives, and in fact following their manner of living.

Captain Osborn also says that Dr. Kane was unprovided with preserved meats or preserved vegetables. Mr. Grinnell states that the expedition carried upwards of ten thousand pounds of preserved meats, four thousand pounds of pemmican, and a large quantity of preserved vegetables, besides salt pork in large amounts, and twenty-six tons of coal.

The principal reasons why Dr. Kane suffered such incredible hardships during the second winter are these: He expected that in the fall of the second year the ice would give way, and he would be enabled to start for the south, and while waiting for such a day to arrive the season for hunting passed by, and he was compelled to again endure the Acrtic winter without sufficient preparation, and the season was so unusually severe that some seven of the Esquimaux died in the neighborhood from starvation, on account of the ice freezing so heavy that the seal and walrus were compelled to go further from land to find their breathing holes.

All these things should be borne in mind when we consider the unparalleled sufferings of Dr. Kane.

THE LINE OF POLAR DISCOVERY.

In the same paper Captain Osborn discusses the direction to be taken by the new Polar expedition which it is proposed to send out under the auspices of the British government. He proposes that two steam vessels be ready by the spring of 1866; that they will sail to Baffin's Bay, and reach Cape York in August; that one vessel be left near Cape Isabel with twenty-five persons, and the other with ninety-five souls be pressed up the western shores as far as Cape Perry, taking care not to exceed three hundred miles from her consort. That autumn, he adds, the southern ship should connect herself with the northern vessel by depots, and the northern send depots towards the Pole, ready for spring operations. In 1867 and 1868 sledge and boat parties should be directed towards the Pole, and in 1869 the expedition should return from Smith Sound.

Captain Osborn lays great stress upon passing up the western coast of Smith Sound and Kennedy channel, to avoid the difficulties which beset Dr. Kane, who was driven into winter quarters in lattitude 78° 37′, by drifting ice, which afterwards, by the action of the currents and winds, was converted into hummock ice, and greatly impeded travel. Captain Osborn forgets that Dr. Hayes, surgeon to the second Grinnell expedition, in company with William Godfrey, on the 20th of May, 1854, crossed over to the western coast of the channel up the shore to 79° 45′, and saw in the distance a headland, which he called Cape Frazer. The result of this expedition showed to Dr. Hayes the great advantage of the west coast over the eastern as a route for an expedition seeking the Pole, on account of the trend of the coast, which caused the drift ice to pass upon the eastern shore, completely filling up the bays and harbors with broken pieces; while the western shore was free, offering a channel with little or no obstruction.

Dr. Hayes's winter quarters were to have been at Cape Frazer, and from that point, as announced by himself in March, 1860, he hoped to reach the pole by means of sledges and boats. It certainly appears that he was the first to propose, in a public manner, an expedition for the search of the pole based upon this fact. He started an expedition to accomplish it; but the year of his arrival at Smith Sound was remarkable for wrecks and much ice, and his ship having been injured, he was compelled to turn back after an absence of fifteen months and thirteen days, without accomplishing his object.

Captain Osborn, in sketching the mode of carrying out his plan, assumes, as the very first point, the absolute necessity of sending out the vessels under naval auspices and naval discipline, assigning as a reason that such an expedition needs all the resources of a naval dockyard and a special knowledge of vessels, food, raiment and equipments to ensure safety and success. He seems to overlook the fact that many of the greatest discoveries in the Arctic regions have been made by persons wholly unassisted by governments—such as the discoveries of the magnetic pole in 1831, by Sir John Ross, who was fitted out by the liberality of Mr. Sherif Booth (afterwards Sir Felix Booth); the finding of the first relics of the Franklin Expedition in 1854, by Dr. Rae, on his overland exploration made at the expense of the Hudson Bay Company; the bringing home of the only record of the Franklin expedition by Captain McClintock in the yacht Fox, mainly equipped by Lady Franklin; and lastly the expedition fitted out by Mr. Grinnell, under the command of Dr. Kane, which probably discovered the open Polar sea, and was really the first to make a thorough investigation of Kennedy Channel, through which Captain Osborn proposes that this new expedition shall pass.

Captain Osborn suggests Sir Leopold McClintock as the fittest man to head such an expedition; and after reciting some of the advantages to be derived from an exploration to the Pole, he closes with the hope that the work may first be accomplished by an Englishman—a remark echoed by Sir Edward Belcher, who says that "this great problem of the polar regions should be solved by Englishmen; not agitated here, and the Americans allowed to take the lead as they did in Japan."

Inasmuch as Americans first pointed out the new line of discovery, and have been the first to reach the highest lattitude on land, we may be pardoned the expression of a hope that as we have the honor almost within our grasp, it should not be permitted to pass into the hands of any other nation, but that the final triumph may become the crowning glory of that American enterprise which has already accomplisbed so much.

## INCREASE OF FARE FOR HIGH SPEED TRAINS.

We long ago came to the conclusion that there should be an extra charge for passengers on express or fast trains. The extra cost of these fast trains should be paid by those who are benefited by them by the saving of time, and not assessed upon other traffic that costs the companies much less. The New York *Tribune*, referring to the raising of local or way fares, thinks the principal railway companies should reorganize their passenger business stubstantially upon some such basis as this:

"1. *Emigrant* trains, of plain but commodious cars, running but *twelve* miles per hour including stops, (360 miles per day,) and carrying all who offer at one cent per mile.

2. *Common* trains, running 20 miles per hour inculding stops, (480 miles per day,) and taking all passengers at two cents per mile.

3. *Express* trains running at 40 miles per hour including stops, (960 miles per day) each train preceded five minutes by a pilot-engine, at whose approach a gate shall be closed across every highway that crosses the track on its level and *kept* closed till the train passes. Wherever this can not be done (as in the streets of a city) the train to be slowed down to twenty miles per hour. Fare *four* cents per mile, to be wholly refunded when the train arrives so late as to miss a connection. Where it is thirty minutes behind, but still in time to connect, half the fare to be refunded, so as to reduce it to common fare. In seasons of obstruction from snow, flood or ice, express trains to be run on common time and a common fare.

We submit this as the true way to adjust fares and to increase them when they are increased at all. Our railroads are being rapidly worn out by the high speed of our great express trains, which do not pay as they ought. Stand beside a track when one of these great trains goes thundering by, note how rails quiver and ties shudder before and behind as well as under the rushing monster, and you will have the same idea of the cost at which high speed is attained, for which it ought to pay, but does not. He whose business requires that he be transported from this city to Buffalo between 7 a. m. and 7 p m. can well afford to pay $18 for it; and the roads as richly earn that sum as they do $4 50 by carrying a poor emigrant through in 36 hours, or $9 by carrying an ordinary passenger in 18 hours. Carrying the great body of passengers at express speed is a ruinous mistake. They do not pay for it, and do not want it at its real cost; but charge fairly for high speed, and those who really want it will use and pay for it. And this—not an increase of way fares—is the true mode of increasing railroad receipts wherever an increase is required."

There is a certain degree of propriety in these suggestions, though we are not prepared to recommend them all. Our business men and pleasure seekers who must or will travel fast can afford to and are willing to pay for the saving of time, and whether they are willing to pay or not, they should be made to, if they use these fast trains. To the great majority of these classes the difference of a double fare for going a journey of two hundred miles in five hours instead of ten hours, would be a matter of very little consequence. Time is money to these classes, and the saving of time by running fast trains is emphatically spending money by the railway companies in just about the proportion of the speed employed. Those who use the fast trains should pay a just price for them, and those who are content to use the slow trains should only pay their fair proportion. The great increase of the way fares which has been adopted of late we can but regard as bad policy. Charging at the rate of six and seven cents per mile on slow or accommodation trains,' as they are called, for moderate distances, is not a money-making operation in the end. Excessive charges beget opposition lines, and lead people to find other means of conveyance, and really detract from the character of the railway as a public convenience. We are aware that no schedule of prices can be made that will be mathematically and exactly fair, and prevent grumbling; but an approximation to this may be made by graduating the price nearer upon the speed employed. Increased speed increases the expense in a rapid ratio, and the parties benefited by the increase of speed should pay for it. The proposal to send a pilot-engine five minutes ahead of each express train, we hardly think our managers will concur in, either as a measure of economy or safety. A track-police with signal stations at all exposed points and the free use of the telegraph, would be vastly cheaper and better.—*Railway Times.*

## STEEL LOCOMOTIVES.

The Manyport and Carlisle Company have for some time past employed steel to a great extent in substitution of ordinary iron for the working parts of locomotives, and, as we are informed, with the most satisfactory results. The traffic on the line is principally coal and mineral. It has been found that with the ordinary iron tyres on the engine wheels, the distance run was not more than 90,000 miles —in many cases not more than 60,000 miles — and the wheels require to be taken from under the engine for every 20,000 or 30,000 miles run, for repairs and "turning up." In the case of the steel tyres, however, the wheels will run 100,000 miles before they require "turning up" or repairing. The result of a very careful examination of the effect of wear leads to the opinion that these wheels will run from 350,000 to 500,000 miles, or equal to same twelve or fifteen years' work of a daily average of about 100 miles. The difference of cost as between the two metals is not great; in the one case it ranges from £40 to £45 per ton, while the steel is about £55, the cost of labor in placing the tyres on the wheels being nearly the same in each case. The company have a number of boilers, axles, cranks, and eccentrics made of steel in constant use on the line, and they have given the greatest satisfaction. These have not, however, been sufficiently long in operation to enable a comparison to be drawn between them and the ordinary iron portions of the locomotives; but there is reason to believe that the saving in point of wear will be equal to that effected by the substitution of steel for ordinary iron tyres. The ordinary eccentrics are expensive to keep up, but those which are made of hardened steel do not require any looking after for ten years, not even to the slackening of a bolt, so far as regards repairs. The experience obtained on this, and we believe upon some other railways, points to a very important mode of saving in one of the largest items of cost in the working expenses of railways. The subject will, we have no doubt, receive careful consideration from the managers of railways. —*London Railway News.*

## NEW COAL THEORIES.

In a paper entitled "Some Observations on Coal," read by Mr. Thomas Goodall, of Craigderran, before the Edinburgh Geological Society, the writer stated that he had chosen this subject, as he had been engaged in the production of coal all his life, and thus took a peculiar interest in any geological questions affecting it. He would neither refer to the truisms oft repeated, of the influence of coal in forwarding the prosperity of the country, nor to the statistics showing the extent and probable duration of our coal-fields, but upon the latter subject he must express his opinion that they have been sometime much underrated, both as to extent and durability. The greater part of England, he continued, is, geologically speaking, a coal-field, although a large extent of it is thickly overlaid with superincumbent strata. There is no reason to doubt that a great extent of this area may be worked some day, although at present it is not reckoned in the coal-fields at all. It is certainly not for us to say how far our successors may be able to penetrate into the interior of the earth one hundred and fifty or two hundred years after this. Coal workings are now being successfully carried on at a depth which was not considered at all practicable sixty years since, and that, too, in ground which was then considered beyond the limits of the coal-fields. He thought there was no fear but from improvements, in mechanical appliances that, if required, coals will be worked in ground and brought from depths of which we have now no conception. He said, if required, because he had an idea, although interested in coal, that long before our known coal-fields are nearly exhausted, the use of it may be altogether superseded, and that two hundred years hence our descendants, although they may give us credit for doing well, so far as our knowledge extended, will consider our mode of raising heat very clumsy, and not at all suitable for them. In any view, therefore, of the case, whether from the extent of our coal-fields or the probability of the use of coal being superseded, he thought we had no reason to anticipate the decline and fall of Britain from the exhaustion of her coal fields. Entering now upon the region of theory, he would give his ideas as to the formation of coal, though they may be absurd or antiquated, as he was not well read up in the science. The bases of all the theories previously put forward with regard to the formation of coal have been that the beds of coal, as we find them, have been formed by immense accumulations of vegetable matter deposited in estuaries, submerged forests, peat-bogs, and such like, spread out and extending in continuous regularity over immense areas, and afterward covered over with sands and clays, and that this process has been repeated in regard to every seam of coal. He was never altogether satisfied with these theories, as it is inconceivable to him, and he can see nothing analogous to it in nature, that these masses of vegetable matter could in this way be laid down as regularly and systematically as we find a seam of coal. He could not conceive such a mass of vegetable matter as would be required to form a bed of coal—say ten feet thick—laid down with such regularity, and extending over such a large area, as we find such a seam of coal. Certainly, a submerged peat moss, from its homogeneous mass, would be the nearest approximation to any thing like possibility in the case, if we could conceive such a peat-moss, but that a heterogeneous mass of vegetable and other matter, such as is being deposited in the estuaries of say the Mississippi or Mackenzie rivers, could, as some of our most eminent geologists assert, form a bed of coal such as we find, is to his mind impossible. The coal-measures in this country occur between what we would call the old and new strata, and geologists should endeavor to discover the reason in nature for this. It may be said that in the older strata there was not sufficient vegetation at the time to form beds of coal. But this is begging the question; as, for any thing we know to the contrary, vegetation may have been as profuse as during the carboniferous era, although its traces are now obliterated. With regard to the new strata, however, there can not be any such assertion made, as in them there is abundant tangible evidence of submerged forests and peat-mosses, and of drift-wood and other vegetable matter, having been carried to and deposited in estuaries, and of these being elevated and submerged times out of number; yet all these agencies have not succeeded

in forming beds of coal. He would observe that, although coal contains a great proportion of vegetable organisms and impressions, it does not prove, and does not in the least affect the question as to coal being formed by the accumulation of vegetable matter, as it is well known to any practical geologist that these organisms and impressions are found in as great profusion in some sandstones as in coal. The theory he suggests as to the absence of coal in these strata, and the pressure of it in the intermediate strata, is that if even there were coal in the old strata, it has been obliterated by chemical and other agencies; that the new strata have not had time for the formation or development of coal; and that the intermediate or carboniferous strata, in point of age, are in the happy medium for the existence and development of coal. He does not deny that vegetation was more profuse during the carboniferous era than since, but this could only be in degree, and if coals had been formed in the way which has been taken for granted during the carboniferous period, we should also have had coals from the same cases in the new strata, though probably not so thick. He thinks it apparent that sedimentary strata are deposited in a hetero geneous mass; that these are afterward simplified by mechanical, chemical, and other agencies; and that the longer these strata exist, the more simple and homogeneous they become in structure and composition. It seems to be the law of Nature, that there is nothing permanent in our world, that there is nothing at rest, not even a single atom; and that every thing terrestrial is drifting toward what we would call simplicity—its normal condition.—*Newton's London Journal of Arts.*

## THE COAL TRADE.

The following is a statement of the amount of coal transported over the Lehigh Valley Railroad, for the week ending April 22, 1865:

| WHERE FROM. | Mines. | WEEK. Tons Cwt. | SEASON. Tons Cwt. |
|---|---|---|---|
| Hazleton | do.... | 2,443 08 | 75,106 03 |
| East Sugar Loaf | do.... | 2,399 17 | 34 653 09 |
| Mount Pleasant | do.... | ..... | 10.617 06 |
| Jeddo | do.... | 967 19 | 41,171 12 |
| Harleigh | do.... | 579 12 | 20,327 00 |
| Rhervale Coal Co | do.... | 348 13 | 9,338 00 |
| Stout Coal Co | do.... | 603 09 | 16,922 05 |
| Council Ridge | do.... | 1,482 09 | 29,960 05 |
| Buck Mountain | do.... | 795 10 | 19,925 00 |
| New York and Lehigh | do.... | 1,100 14 | 19,711 03 |
| Honey Brook | do.... | 1,258 12 | 43,782 15 |
| German Pa. Coal Co | do.... | ..... | 17,978 09 |
| Spring Mountain | do.... | 2 584 08 | 29,102 15 |
| Coleraine | do.... | 733 19 | 16,470 14 |
| Beaver Meadow, W. D. | do.... | 5 7 09 | |
| Lehigh Zinc Co's | do.... | 328 16 | 5,359 03 |
| John Connery | do.... | 35 16 | 1,214 19 |
| Mahonoy | do.... | 1,863 06 | 65,687 06 |
| Baltimore Coal | do.... | 641 12 | 10,784 15 |
| Franklin | do.... | 625 16 | 8,358 17 |
| Consolidated | do.... | 239 12 | 18 219 16 |
| Audenried | do.... | 646 11 | 8,252 10 |
| Lehigh and Susq | do.... | 465 06 | 8,236 04 |
| Landmesser's | do.... | 130 13 | 5,133 14 |
| Wilkesbarre C. & I. Co | do.... | ..... | 450 18 |
| Lehigh Coal & Nav. Co | do.... | ..... | 164 07 |
| Other Shippers | do.... | ..... | 95 05 |
| Total | | 21,342 08 | 517,431 18 |
| Same week last year | | 33,820 18 | 486,037 01 |
| Decrease | | 12,478 10 | 31,794 17 |

The following is the amount of coal transported on the Philadelphia and Reading Railroad during the week ending Thursday, April 20, 1865:

| | Tons. Cwt. |
|---|---|
| From Port Carbon | 18,840 03 |
| " Pottsville | 344 11 |
| " Schuylkill Haven | 20,042 00 |
| " Auburn | 794 05 |
| " Port Clinton | 6,704 13 |
| " Harrisburg and Dauphin | 22 02 |
| Total anthracite coal | 46,747 14 |
| Bituminous coal from Harrisburg and Dauphin | 6,860 04 |
| Total of all kinds | 53,607 18 |
| Previously this year | 960,017 18 |
| Total | 1,013,625 16 |
| To same time last year | 985,872 11 |
| Increase | 27,753 05 |

The following is the amount of coal transported on the Schuylkill Navigation, for the week ending Thursday, April 6, 1865:

| | Tons Cwt. |
|---|---|
| From Port Carbon | 7,632 00 |
| " Pottsville | 698 00 |
| " Schuylkill Haven | 11,762 10 |
| " Port Clinton | 711 00 |
| Total for week | 20,803 10 |
| Previously this year | 84,302 00 |
| Total | 105,105 10 |
| To same time last year | 90,959 07 |

The shipments of coal over the Huntingdon and Broad Top Mountain Railroad during the week ending April 22, 1865, and since January 1, 1865, together with corresponding period last year:

| | Week. Tons. | Previously. Tons. | Total. Tons. |
|---|---|---|---|
| 1865 | 7,268 | 83,240 | 90,478 |
| 1864 | 8,080 | 96,007 | 104,087 |
| Increase | 812 | 12,797 | 13,600 |

## LIABILITY OF A BANK

TO THE OWNER OF ITS DESTROYED NOTES.

An interesting case of this nature was recently decided in the Supreme Court of Pennsylvania. Adams Express Company received from the Merchants' Bank of Baltimore, a package of $9455 in bank-notes of the Hagerstown Bank, to be delivered to the latter. When the package was opened, it contained but $6095—the sum of $3360 having been abstracted from the package, and a bundle made up of newspapers, cut to the proper size, substituted. The Express Company gave their check to the cashier of the Hagerstown Bank for the amount of the loss, and took the receipt of the casbier. Subsequently it was devolved that a temporary employee of the Express Company was subject to occasional attacks of insanity, and had taken the money. Upon being assured that he would not be prosecuted if he told the truth about the matter, he confessed that he had taken the money from the package, at the express office in Harrisburg, on October 8th, about one o'clock in the morning, and that he took it home to his father's house and put it in a box, where it remained until October 13th, when he took it, except $45, to a swamp, about two miles from Aarrisburg, and burned it there. The amount of the sum burned was, therefore, $3315. The spot was examined by respectable persons, and a quantity of cinders and ashes found, showing the character of the paper burned. There was also found a number of pieces of the Hagerstown bank-notes, which were produced and identified on the trial. It was also proved that the young man, at the time he broke the package and took the notes, was in "one of his spells," or fits of insanity; and that after these attacks he had always a clear and distinct recollection of all that took place while his mind was under their influence.

The Express Company tendered to the bank a bond of indemnity, and then brought suit. Under the instructions of the Court, a veedict was rendered in favor of the Express Company for the amount claimed, $3315, whereupon the Hagerstown Bank sued out a writ of error, and the case was argued before the Supreme Court of Pennsylvania. In the opinion of the Court, the Express Company undertook to carry $9455 from Baltimore to the Hagerstown Bank. It was the bank's property, and the carrier was bound by law to deliver it to them. An agent or clerk of the Express Company stole $3360 from the package during the passage. It was the duty of the Company to make good this sum to the bank. The bank could have recovered against them at law. When the Express Company, therefore, paid to the bank $3360 in settlement of the claim, they did only what the law would have compelled them to do; and the bank received only what it was entitled in good conscience and equity, to receive and retain. So far from being a payment in mistake of legal rights and duties, it was a payment in discharge of clearly ascertained legal rights and dutics.

But the consequence of such settlement was to transfer the property in the notes from the bank to the Express Company. The bank, having received the value of the notes, had no further rights to them, and was bound to redeem them when presented, as it would redeem any other paper issued by it. The clerk or agent of the Company had the custody of the notes, but he had acquired no property in them, for he had taken them from his employer feloniously. He was bound in law and conscience to return them to his employers, in whom the title had now vested absolutely, and whilst he retained the custody, he must be considered as holding for them. Whatever of the notes he passed away was the Company's loss, and whatever he destroyed inured to their benefit; for it entitled them to claim so much money from the bank as for destroyed notes of their issue.

It was argued for the defendant that the wanton destruction, by their own agent, could give the Express Company no right of action. But the Court held that a wanton destruction by a faithless agent, not in pursuit of the duties for which he was employed, but in gross violation of them, could not be imputed to the Company as their wrongful act. It was their duty to employ honest and faithful agents, and when in pursuit of their calling as common carriers, their agent failed to deliver all the money they undertook to deliver, they were clearly responsible to the bank for his negligence and fraud. But when, by settlement with the bank, the Company had become the owner of the notes in question, it was a fraud on *them*, not on the bank, to surreptitiously destroy the notes. It was like a malicious destruction of any other property of the employer by an anfaithful servant. What right has the bank to profit by his fraud on his employer? By what rule of law or of morals can they adopt his wrongful act and appropriate it to their benefit? Ordinarily an employer is not responsible to third parties for the willful wrong of a servant, even in the course of his employment; but here was an act, the destruction of the notes, which was not in the course of the agent's duties, which was not injurious to the bank, for if not destroyed, the bank was more certainly liable to redeem the notes than if they were destroyed, but which was a great wrong to the employers, and to nobody else. Now, to treat the bank as the injured party, and the Express Compa-

ny as the wrong doer, would he an extremely artificial view of the case and a strange inversion of legal principles.

The real queston in the case was, whether there was adequate evidence of the destruction of the notes. No man loses his right to real and personal property or to a chose in action by losing the evidence of it; but if he can not produce the primary evidence he is bound to account for its absence, and to produce secondary evidence that shall be reasonably satisfactory to a court and jury. As long as a bank-note exists, the bank is liable to redeem it in the hands of the bearer; it is therefore necessary for a party who calls on a bank to redeem notes without producing them, to prove something more than mere loss, because though lost to the real owner, the bank remains liable to tbe finder. But if their destruction can be shown, there is an end of the bank's liability to some casual holder, and the owner may recover them.—*Stockholder.*

## CATAWISSA RAILROAD COMPANY.

The annnal stockholder's meeting of the Catawissa Railroad Company was recently held at the office of the company in Philadelphia. The annual report of the directors was submitted by J. H. DuPuy, Esq., from which we condense the following facts relative to the earnings and expenses of the road for the year:

| | |
|---|---|
| Gross earnings | $435,435 68 |
| Less rent and due connect'g roads | 63,362 92 |
| Earnings | $372,042 75 |
| Less working expenses, maintenance and general expenses | 223,011 65 |
| Profits of the year | $139,031 10 |

Against $128,355 65 for the previons year; equal to nearly six per cent. on the preferred stock issued, after deducting interest on bonds.

The earnings for the first ten months of the year amounted to $248,549 49, against $229,032 49 for the same period of the previous year, but by the suppression of the coal trade from the Lackawanna region during tbe last ten months this increase was reduced to 13.32 per cent.

The property of the company has been very advantageously improved during the year. The sum of $220,628 46 has been expended for branch coal road shops and engine house at Catawissa, new locomotives, bridges, sidings, rolliug stock, etc.

The lessees of the company's coal property, contrary to their expectations, owing to the difficulty of securing labor to complete their extensive works, were unable to forward coal to market during the year. This coal has been found to be of the very best quality at Lehigh.

The prospects of the coming year's business are very promising. Already the demand for cars is more than double the present supply. Negotiations are now in progress by which a large and adequate supply of cars will be obtnined on equitable terms for the transaction of the joint business between the P. & E. and Catawissa Railroads to and from New York.

A dividend of three per cent upon the preferred stock was paid in August last.

The shops of the company at Catawsssa have been completed, and will add largely to the economical working of the road.

The business, which has been steadily and healthfully increasing upon the road, is in no direct manner attributable to the war or Governmcnt patronage. Henco when peace comes, it is but reasonable to suppose the sources of revenue will he but slightly or temporarily affected, if at all.

The report closes by thanking Mr. Geo. Webb, the superintendent, and his assistants, for the faithful performance of their dutics.

The annual report of Mr. W. L Gilroy, the Treasurer, was then read. It contains a full statement of the financial affairs of the company.

The report of Mr. George W. Webb, the Superintendent, was next read. It gives a detailed statement of the operations of the road during 1864. Three new locomotives have been added to the rolling stock, and several have been repaired. The passenger cars are all in good condition, and are ample to accommodate the travel. The road has never been in better condition. The bridges, trestles, etc., have all been renewed, and accidents have been of very rare occurrence.

## RENEWAL OF FORFEITED APPLICATIONS.

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
March 30, 1865

The law passed by Congress March 3, 1865, giving the right to inventors whose applications had been forfeited, by reason of defanlt in the payment of the final fee of *twenty dollars* within the six months prescribed by law, to renew their applications, requires a new application to be made, which may be done by filing a new *petition* and a new *oath*, and the payment of an additional fee of *fifteen dollars*.

Upon the receipt of the above by this office, the application will be again examined. The *specification*, *drawings* and *model* filed in the original application will be used in this examination. Papers in forfeited applications can not be withdrawn. Copies will be furnished, however, on payment of the usual fees.

The final fee of twenty dollars, if not already paid, will be required if a patent is allowed under the renewed application.

D. P. HOLLOWAY,
Commissioner.

### AN ACT

*Amendatory of "An act to amend an act entitled 'An act to promote the progress of the useful arts,' approved March three, eighteen hundred and sixty three"*

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That any person having an interest in an invention, whether as an inventor or assignee, for which a patent was ordered to issue upon the payment of the final fee, as provided in section three of an act approved March three, eighteen hundred and sixty three, but who has failed to make payment of the final fee as provided in said act, shall have the right to make an application for a patent for his invention the same as in the case of an original application, provided such application be made within two years after the date of the allowance of the original application: *Provided*, that nothing herein shall be so constructed as to hold responsible in damages any persons who have manufactured or used any article or tbing for which a patent aforesaid was ordered to issue.

This act shall apply to all cases now in the Patent Office, and also to such as shall hereafter be filed; and all acts or parts of acts inconsistent with this act are hereby repealed.

Approved March 3, 1865.

## IRON PASSENGER COACHES.

The Chicago and St. Louis Railroad Co. have just received one of two iron passenger coaches constructed for them in February last by Charles S. Munn, dealer in railroad supplies, No. 14 State st. This car is sixty seated, beautifully finished and furnished, and in point of elegance and general appearance, is not excelled, if equaled, by any passenger coach in the northwest. It is constructed entirely of iron, with the exception of the doors and windows and inside linings. The advantages of iron over wooden coaches are very numerous. In the first place they are stronger and therefore safer. In case of collision the iron body is not broken, and the inmates are not killed or injured by rough splinters. Collisions have happened to iron coaches, but they have received no worse damage than being deprived of their platform and trucks, and a few indentations easily repaired. Wood coaches, under similar circumtances, have been almost irretrievably ruined. Like comparative results have always been reached with iron and wood coaches where trains have been run off the track or ditched. This economy of repairs is an important item, and deserves to be well considered, even if the greater degree of safety to passengers be not thought of.

Then an iron coach is six thousand pounds lighter than a wooden coach of the same capacity. Railroad men know what it costs to draw a ton of dead weight per mile over their respective tracks, and can very readily estimate the saving. The lightest wood coach on the Chicago and St. Louis Railroad, as proved by actual trial, weighs three tons more than this iron coach. There is a very material saving in operating expenses by using iron coaches.

Another advantage of iron over wood coaches is their increased durability. Wood coaches, after a few years' service, become decayed. The joints, from the exposure to the sun and rain, open and take in water, and the whole structure becomes dilapidated. In iron coaches there is no warping and no opening of joints, and when they become weatherbeaten, they only need a fresh coat of paint to make them as serviceable as ever.

Freight cars are also made of iron by these parties, possessing the same marked advantages over modern freight cars, as iron over wooden passenger coaches. Cars of this make are now in use on the Chicago, Burlington & Quincy Railroad and Michigan Central Railroad, the last heing run by the American Express Company who prefer them, not only for the advantages named above, but for their absolute safety against fire. Engineers say that with a given amount of power, they can more easily haul three iron than two wooden coaches.

The builders of these iron coaches have arrangements for making them of every conceivable pattern, as regards style, shape of roof, inside and outside finish, heating and ventilation and minor details.

With the advantages above enumerated, it would seem that railroad managers would largely consult the interests of their respective roads by setting aside altogether the cumbrous wooden structures they have been so long using and substituting therefor light, airy, iron coaches.

Robert Hale, Esq., the popular superintendent of the Chicago and St. Louis Railroad, is entitled to great credit as being the pioneer in the introduction of iron coaches in the northwest.—*Chicago Tribune.*

## PENNSYLVAANI R. R. EARNINGS FOR 1864.

Condensed exhibit of earnings and expenses, together with net earnings of the Pennsylvania Railroad, for each month during the year 1864:

| Months. | Gross Earnings. | Expenses. | Net Earnings |
|---|---|---|---|
| January .... | $885,496 93 | $712,268 01 | $173,228 92 |
| February .. | 974,741 97 | 714,191 28 | 260,550 69 |
| March ..... | 1,188,358 37 | 785,116 41 | 403,241 96 |
| April..... | 1,253,072 76 | 764,843 45 | 488,229 31 |
| May ..... | 1,298,999 35 | 788,064 33 | 510,930 02 |
| June ..... | 1,178,858 79 | 876,066 60 | 302,792 19 |
| July..... | 1,131,722 43 | 858,036 56 | 273,685 87 |
| August ... | 1,340,876 49 | 864,907 99 | 475,468 50 |
| September.. | 1,347,384 71 | 996,700 84 | 351,293 77 |
| October ... | 1,419,115 88 | 920,324 21 | 498,791 67 |
| November... | 1,395,698 84 | 1,213,325 34 | 182,373 50 |
| December.. | 1,345,226 14 | 1,200,699 07 | 144,527 97 |
| Totals ... | $14,759,057 66 | $10,693,944 19 | $4,965,113 47 |

Abstract of passengers and miles traveled on the whole line of the Pennsylvania Railroad and branches, for the year 1864:

| 1864. | In. pass. | Mils. Trav. | Av. Dis | Equiv. Through Passen |
|---|---|---|---|---|
| First class passen.. | 1,984,205 | 101,898,545 | 53.8 | 284,232 |
| Emigrant passen... | 22,924 | 7,757,364 | 338.4 | 21,799 |
| Coupon passengers | 254,000 | 2,967,583 | 11.8 | 8,336 |
| Troops ..... | 198,084 | 34,249,513 | 172.9 | 96,207 |
| | 2,366,213 | 146,873,005 | 62 | 412,575 |

Freight earnings of the Pennsylvania R. R. for the year 1864.

| | Total. |
|---|---|
| From Philadelphia to Pittsburg..... | $1,439,678 83 |
| " Philadelphia to way stations..... | 343,318 75 |
| " Way stations to Philadelphia..... | 1,721,871 33 |
| " Pittsburg to Philadelphia..... | 2,810,129 87 |
| " Pittsburg to Baltimore,..... | 888,983 46 |
| " Pittsburg to way stations..... | 992,689 27 |
| " Way statien to Pittsburg ..... | 818,748 97 |
| " Baltimore to Pittsburg..... | 85,689 68 |
| Local—Eastward ..... | 1,401,579 64 |
| Westward..... | 239,309 52 |
| Total freight earnings ..... | $10,301,999 32 |

Information from record books, accounting department, Pennsylvania Railroad, 1864.

| | |
|---|---|
| Tons of through freight eastward,..... | 322,497 |
| Tons of through freight westward ..... | 147,972 |
| Tons of local freight eastward.. ..... | 1,482 647 |
| Tons of local freight westward ..... | 835,263 |
| Total tons moved in cars of Pennsylvania Railroad Compaoy, and of individuals ..... | 2,585,379 |
| Tons of free goods..... | 179,497 |
| Mileage of through freight eastward..... | 115,433,989 |
| Mileage of through freight westward ..... | 52,974,629 |
| Mileage of local freight eastward..... | 200,041,352 |
| Mileage of local freight westward. ..... | 52,157,252 |
| Total mileage in cars of Pennsylvania Railroad Company and of individuals ..... | 420,627,222 |

RAILROAD VERDICT IN ALLEGHENY COUNTY.—The case of Allegheny county *vs.* The Allegheny Valley Railroad, commenced on Monday in the Court of Quarter Sessions, before Judge Sterrett, was concluded yesterday. This was an action to recover the interest paid on coupons of certain bonds issued by the county to the company, amounting in the aggregate to $475,924. A contract was entered into, it appears, between the county and the railroad company, in which it was agreed that if the county should subscribe for fifteen thousand shares of the capital stock of the company, and pay therefor $750,000 in bonds of the county, maturing in thirty years, with coupons for the payment of interest semi-annually, the company would furnish money for the payment of interest thereon. It is alleged that the company failed to furnish the money for the payment of the interest on the first Monday of November, and have made no pretension to doing so since, thus compelling the county to pay the interest as the coupons became due; hence this suit to recover the amount paid by the county.

In accordance with the instrictions of the Court, the jury brought in the following special verdict, subject to the opinion of the Court on the questions of law reserved: "That if, upon the whole matter the Court shall be of the opinion that the plaintiff is entitled to recover the full amount paid for coupons which matured and were lifted before the institution of the suit, then we find a verdict for the plaintiff for $335,983 82; but if the Court shall be of the opinion that the plaintiff is entitled to recover only the amount paid for the coupons belonging to bonds equal in amount to the par value of the stock owned and held by said plaintiff at the maturity of the coupons so said, and that the plaintiff is not entitled to recover for coupons paid, which were matured after the sales of the plaintiff's stock on the several writs of *fi. fa*, aforesaid, and which belonged to the bonds, equal in amount to the par value of the stock so sold, then we find for the plaintiff in the sum of $182,578." —*Pittsburg Chron., May* 3.

## MONETARY AND COMMERCIAL.

The great theme of the week has been the ignominous and superbly ridiculous capture of *Jefferson Davis*, the representative embodiment of the rebellion. The attendant circumstances of the capture were of such a ludicurous character that it would be vain to expect history to furnish a parallel. All the boasted *dignity* and *higher civilization* of the Southern character that was supposed to have been centralized in Mr. Davis, has been dissipated, and has disappeared forever under *crinoline crossing a worm fence.* The whole attempt was unworthy the efforts of a "*five year old*" to escape his mother's spanking, and is a palpable demonstration that he has either become "*impotent,*" or that his *capacity* is not sufficient for great emergencies. The fate of Booth, the loathed instrument of the last act in the long catalogue of barbarities for which Mr. Davis is alone responsible, riscs to the dignity of heroism compared with this subterfuge of which a rag-picker would have been ashamed. The New York gold market has had a downward tendency during the past week with but little disposition to operate for an advance. Mouey is easy at low rates for good paper with a light demand. Exchange is firm, the demand being in excess of the supply. The usual quotations are:

| | | |
|---|---|---|
| New York.....50@75 ℘ M. | 1-10@¼ prem. |
| Philadelphia....50@75 ℘ M. | 1-10@¼ prem. |
| Boston.....50@75 ℘ M. | 1-10@¼ prem. |
| Baltimore.....1-10 dis. | par |
| Gold.....28 prem. | 30@31 prem. |
| Silver .....18℘20 prem. | 20@25 prem. |
| Vouchers, city.. 2@3 dis. | |
| Vouch's, coun'ry 5@15 dis. | |
| Certificates.....½c dis. | par- |

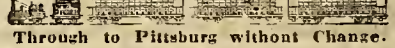
In reference to general trade, the *Price Current* says:

"The jobbing business has been quite active during the week, though less so than it was in April, and prices of merchandise generally have been well sustained, which is in part owing to the light supply of most articles. Flour, wheat and provisions, however, have been very dull, and prices declined, especially pork, which is four dollars a barrel lower than it was a week ago. Flour declined 60c a barrel in New York, but holders in this market have not been willing to conform to this decline, and have not offered their stocks at any lower rates than the nominal one current a week ago. It is clear that those who hold flour and wheat in the west have not been able to comprehend yet the legitimacy of the decline in the eastern markets, and suppose it to be the effect of a "bear" movement, The impression that gold will react, and consequently prices of all articles of produce and merchandise, still clings to the agricultural and mercantile community in a remarkable manner, notwithstanding that this opinion has made bankrupts of thousands during the last six months.

The *N. Y. Tribune*, of Monday, says that "The railway share list was dull but steady at the First Board. There was a strong demand for cash stock, with but little offering, but the bears were offering large amounts of stocks at sellers option. All the leading shares are in sharp borrowing demand. Erie was worth ¼ per cent for delivery to-day and hard to be got. Michigan Southern, Rock Island, and Michigan Central can not be had, and the bears do not deliver their stocks with any degree of regularity. After the Board the market rallied slightly on the cash demand for stocks, but in the street it broke from 1@2 per cent on the hammering of the bears, who offered large blocks of stock, seller's option, and unsettled the market, on the theory that the money market is to become more stringent by the Secretary of the Treasury having drawn his balances from the National Banks. In the street the market was excited and generally lower; later in the day the market closed steady. New York Central, 89½@90; Erie, 76@76⅛; Reading, 90½@91; Rock Island, 93¾; Fort Wayne, 92¾.

Money continues very easy, at 4@5 per cent on call loans, with occasional transactions at 6 per cent, and no large amounts could be loaned at these rates, the volume of loanable funds is on the increase at the centers, and as long as the policy of the Treasnry Department continues unchanged, it will be impossible to make a stringent money market."


## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAIL ROAD, in connection with the Cincionati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
Pittsburg, Pa.

my11

## MONDAY MORNING, MAY 8,

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING ONE THROUGH TRAIN between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at 8:00 A. M.; arrive 8:10 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

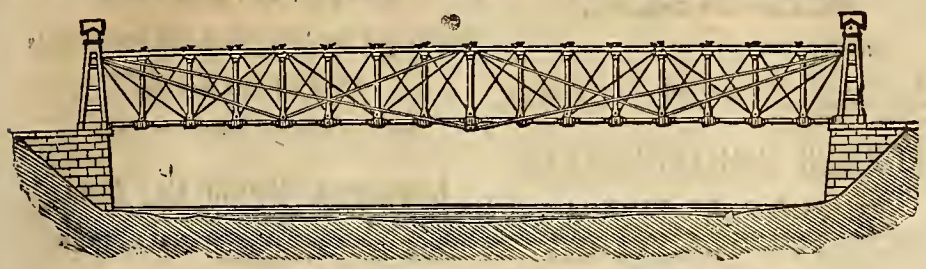
☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '63. ly. Letter Box, 1392. C. J. SCHULTZ, Pittsburgh, Pa.

---

**HOLENSHADE, MORRIS & CO.**

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets etc, ach Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y 1

---

**KNOX & SHAIN,**

**Engineering and Telegraphic**

INSTRUMENT MAKERS,

**PHILADELPHIA**

---

JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE

---

BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS

**Either Single or Double Plate, With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

Manner, at shortest, and on the Most Reas Terms.

---

Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

**MACHINE SHOP**

SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

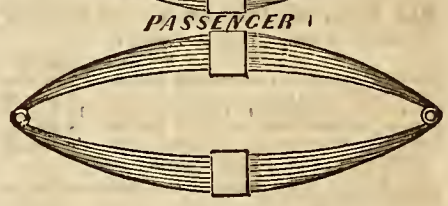
RAILWAY SPRINGS.

**FREIGHT**

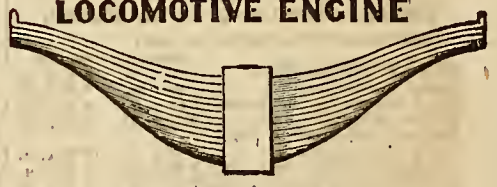




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS,**

Made at his Shops in Philadelphia. Employing only the most experienced workmen and FIRST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI, O.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

**W. M. F. HEWSON,**

## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore of the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY

W. P. SMITH, *Master Transportation, Baltimor*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A. M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A. M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Shuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St. Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sonday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all Information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
General Ticke Agent.

W D. GRISWOLD ner'l Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other ronte.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with Instructions for applying them.

Spt. 2 MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON, DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

THE SCHENECTADY

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 Inches in diameter, and branches for same, &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!

## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P. M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East a Wes

WM. TEARNE Supt

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, MAY 25, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 8:15 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| *Atlantic & Great Western—* | | |
| | 8:00 A. M. | 8:40 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:45 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond, Chicago and Indianapolis | 7:00 A. M. | 9:45 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 10:20 A. M. |
| Richmond and Chicago | 7:00 P. M. | 12:35 P. M. |
| Hamilton Accommodation | 11:30 P. M. | 6:45 A. M. |
| do do | 7.00 A. M. | 8:05 A. M. |
| Dayton Accommodation | 2:20 P. M. | 9:45 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Chicago and St. Louis Express | 7:00 A. M. | 12:00 M. |
| Springfield and St. Joe Express | 1:00 P. M. | 5:00 P. M. |
| St. Louis and Chicago Express | 4:00 P. M. | 2:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 4:50 P. M. | 8:35 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:40 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 6:50 A. M. | 1:00 P M. |
| Seymour Accommodation | 3:45 P. M. | 5:00 A. M. |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 7:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 8.00 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:55 A. M. |
| Evening Express | 1:35 P. M. | 6:00 P. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## THE NEGRO AND HIS USES,

AT THE END OF THE WAR.

[From the American Railroad Journal.]

THE UNION PACIFIC RAILROAD.—HOW TO CONSTRUCT IT AND SAVE MILLIONS OF MONEY AND YEARS OF TIME.

The great work of restoring the Union having been nearly accomplished, the next great undertaking we have on hand is unquestionably the construction of the Union Pacific Railroad. Notwithstanding the war and its enormous demands on the people for men and money, the railroad has not been forgotton. The first active movement in its favor was commenced during the war, and a period of great despondency. We can now continue it under the most exhilerating circumstances. In California there is great activity in laying out lines, constructing them and bringing them into use. Our readers have been informed from time to time of the progress of these works which are now going on, so as soon to cross the slopes of the Sierra Nevada, are looking to the approach of the great line from the East, where the difficultics of grade and construction are almost nothing. The Eastern section of this between Leavenworth and 100th parallel is finished for forty miles, and is being rapidly constructed for about 60 more. To the 100th parallel there is no doubt, the company having this part of the route exclusively under their control, will, in good faith, proceed to finish it as fast as possible. The road as far as completed is now doing a profitacle business; indeed it has not capacity at paesent to do all that is offered.

The company chartered by Congress is believed to be engaged in surveys and preliminary examinations of the routes beyond the 100th parallel, but probably will not, before the division E of the 100th parallel is in operation, be able to do much more for want of means of transportation.

The ordinary expectation of the public is that the whole line will be openod in ten or fifteen years.

This is too long altogether, but a delay quite unavoidable unless we can hit on a new plan of operations, and certainly there is one quite opportune and worthy of consideration.

At an adjoining meeting of the Chamber of Commerce to be held on the 15th, notice will be given by Mr. Bloodgood of his intention at a proper time to introduce a resolution to inquire into the propriety and feasibility of the employment of such portion of our large armies as may agree to the service, in the construction of the Union Pacific Railroad.

The mover contemplates the employment of two or three hundred thousand men, to be under military discipline, to receive the usual pay and rations, and to be led by the engineers of the army. As a further reward for their services, they should receive adequate grants of land along the line, so that they may be able to locate themselves on their own properties, to become artisans, agriculturists, miners, engineers, railroad employees or what else they may choose to be.

It is very certain that during the present war our soldiers and military and civil Engineers have together executed most remarkable works with astonishing celerity. Bridges of all sizes, tracks and superstructure, canals and ditches have been the wotk of their hands in every campaign. Large rivers have been turned into new channels or dammed into sufficient depth to pass large fleets around or over shallows. The spade has been as efficiently used as the musket or the sword, and in fact every soldier engaged in these works has become a practional engineer. Now then as these men will in all probability be thrown back on the country very suddenly, and be for some time in want of employment, would it not the best thing to be done for them and for the country, to transfer them with their own consent and with certain inducements of a valuable nature, to the line of the Union Pacific Road, and set them at work. They have most of them already made so many military railroads, that they may be considered as experts.

The following results might be safely calculated upon. The government paoing the wages and furnishing clothing and rations for these men, could offset this in money against the subvention of millions they have agreed pay to the company.

A large body of good soldiers would have regular, remunerating and healthful employment until the road was completed. Their supplies and subsistence would give a great impetus to industry and protection in the country in the vicinity of the work, to the manufactories producing the tools and materials for construction, and in a great degree favor the continuance of numerous works for the manufacture of shovels, spades, crowbars, barrows, trucks, &c., necessary for laborers on railways. A large demand for rail cars and engines would grow up as the sections came into use, while all this production, manufacture and activity would be immediate, for by the proper application of a force of 200,000 skilful men along the line, the whole could be made ready for use *within two years* from the time they commenced work. It is well known that with a force of 5,000 workmen, the Atlantic and Great Western Railway was constructed for a considerable portion of it at the rate of one mile per day. At the same rate, forty miles a day could be constructed and finished by our own troops, if in the number stated, so that in fact between 13 and 1400 miles could be laid in a single year, counting the working days only.

Two years then would give ample time for its construction. At the conclusion of this period farms, mining grants, village and city lots, could be given as hounties and rewards to the workmen. These could then gather their friends and families around them, and permanent settlements and industrial occupations would follow on a large and profitable scale. The probability is that the whole line of the road would be dotted with habitations singly, or in towns and cities; millions of acres of land would be put under cultivation, and in a short time a very dense population would cluster aronnd these infant settlements. And finally the route to California being at once opened, the trade and commerce between the Atlantic and Pacific would become so enormous and so valuable as to materially enlarge the wealth and resources of the country. We may safely say that the best if not the greater part of the trade of the East Indies and all that of the Northern Pacific Ocean would cross our continent in our own latitudes. In short, that wealth would pour in, in such enormous streams, that we should be surprised that we ever doubted our ability to meet our national debt. All these results may be most surely obtained by an immediate construction of the road in the manner suggested, and we believe our gallent soldiers would valunteer as one man for the purpose, for they can see as well as the most prominent men of the country have seen, that we want but this one more element of national strength to open all our mines, and work them, and to reach the Pacific and appropriate its commerce to ourselves.

Nor is the plan a novel one. The great canal of Suez has employed 25 to 26,000 men at one time, and is now navigable from the Meoiterranean to the Red Sea. It seems to us that if this plan he matured and managed as well as our military campaigns have heen of late, we might see cars starting from this city direct for San Francisco in the year 1868, and the traveler pass through countries where 200,000 contented soldiers were gathering their families about them in twice and thrice that number. The plan certainly deserves atteution.

The view here taken by the *Journal* of the speedy construction of the Union Pacific Rail road as the only true policy of the Nation is correct. It is absolutely necessary that the States of the Paciffc should he more closely united to those of the Atlantic and Central portions of our country. To do this, however, not only the Union Central Railroad should be huilt as laid out, hut also a BRANCH, extending from some point on its line to the waters of the Gulf of California, as well as the northern route connecting the waters of Lake Snperior with those of the Pacific. It is well known by those who have carefully studied the subject, that the Branch route proposed is not only the shortest route, taking even Chicago as the starting point, which any one can demonstrate hy taking the map of the United States, and measuring the distances from Chicago to the Pacific, with either a pair of compasses or a piece of thread, hut the gradients are also lower, with a natural road bed nearly all the way and is entirely exempt from the dangerous drifting snows of winter.

But to the main point. What means shall we take to accomplish this end?

The suggestion of the *Journal* that "a large body of good soldiers would have regular, remunerating and healthful employment until the road was completed," is true; hut can not those "good soldiers," if (as most of them are) *skilled white artisans* produce more valuable products, or in other words, *make more money*, hy pursuing thetr accustomed avocations. Is there not some other element that can he employed with equal advantage to the road, and not only with less detriment to the country, hnt also to the positive advantage of all concerned. Let the *Journal* but give *us* the proper credit for the *idea*, and then adopt our theory in full, as contained in our issue of January 26, 1865, and perhaps our united efforts may do somé good. We do not want it understood that we are desirous of interfering with politics, neither do we want to convince the *Journal* that the *Negro* is better adapted for huilding railroads than the *white man*, hut we do contend that the country needs the services of its skilled *artisans* to repair the wastages of war, and that it is the interest of the country and the artisans that he should he allowed to assnme his *usual* peaceful occupations as soon as possible. *They* all have homes and friends most dear, from whom they have already heen too long separate. This in a great measure is not the case with the *negro*. Homes, they have none, never had, and the tender ties of friendly and effectionate have heen torn aunder in a thousand ways. There is not much to render them urgent, to seek their former places of ahode. If disbanded, they will mostly he like waifs thrown upon the waters of the ocean, not knowing whither nor for what ohject they are going, without an ulterior end in view, and a dangerous element in society. They have fought hravely for our cause and country, and while dressed in blue they are praised and petted; hut dishand them and they will he treated as *niggers*, even hy "kid gloved ahlitionists;" these brave hlack men will lose their identity, and amidst the dissipation and vice of uncontrolled faeedom will soon pass away amidst disease and neglect. Now none will deny hut they deserve a hetter fate. Preserve their organizations, retain them under *military discipline*, and *military pay*: the *first* is not half so hard as they have been accustomed to, and the *last* is much greater than they ever received, and would also he the most economical method of constructing the roads.

And as we said in our issue of January 26, "a railroad to the Pacific is a military necessity—a work of defense against foreign foes, as well as being ahsolutely necessary to satisfy the States on the Pacific slope, who, though now as loyal as any other portion of our country, yet we would aud must tie them to us hy the three-fold iron hands of love, interest and common security, and that there is no more Constitutional ohjections to its military construction hy the Government than there is to the construction of the railroad from City Point. This can be done by black soldiers, under *military* discipline, and military pay, as well as hy white lahorers imported either from Ireland, Germany or elsewhere. This is not only true, hut it would he an act of kindness as well as justice to the negro. It would afford him employment that would he profitahle to himself; here he could he schooled with economy and selfreliance, and when the great work was complete, nonc would he found unwilling to award him a home on the line of the high-way that his industry had prepared. One, two, or three hundred thousand could thus he judiciously and profitahly employed in the construction of so many different lines of road, and instead of making a progress of merely "definitely locating 100 miles westward," in the course of a year, ONE HUNDRED MILES A MONTH MIGHT BE CONSTRUCTED, and the country would see, in two years, more development than it can in a quarter of a century by the present plen. The industry of the country would receive an impetus that would dazzle the world, and the increase of our national wealth would he heyond comparison.

☞ Forty miles of the Union Pacific Railway, hetween Kansas City and Lawrence has heen reported upon favorahly hy the Commissioners of the Government. Arrangements should be made to build fifty miles a week.

## THE NATIONAL DEBT—HOW TO PAY IT.

Dr. WM. ELDER, the able statistician, has prepared the following valuable article, designed to enlighten the world, as to the vast resources of the country to pay the national debt, and in so doing has drawn a comparrison hetween our ability and that of Great Britain to extinguish its incnhus. We think the Doctor is too sangnine in his estimates of the increase of taxable property, and at the same time deem his estimate of the revenue that can he ligitimately obtained from export duty as entirely too low. This important source of revenue, export dnty on cotton, tohacco, turpentine, rosin, etc., on which we can levy our contributions on the outside world with impunity, was first and fully set forth in our issue of Sept. 8th, 1864; hut nnfortunately it will he necessary to expunge from the constitution the prohibitory clanse to be found in section 9, article I, of that valuahle instrument, and we think that while we have our hands in improving it, we had hetter make it as perfect as possible. If this is done, and $250,000,000 raised per annum from this source, the estimate of the Doctor will be fully realized, and the national debt can be paid off, even sooner than he predicts.

If the war for the re-establishment of the Union is not ahsolutely ended, the issue of the great struggle now, is neither doubtful nor distant. We are quite near enough to the end of the conflict to take an account of stock, look over our resources, estimate the amount of our liahilities, and arrange the means and terms of liquidation.

### AMOUNT OF DEBT AND RATE OF GROWTH.

We have contracted a debt of enormous amount as expressed in arithmetical figures. We can not state the precise aggregate, for it is not definitely ascertained, hut is known to be something more than half as large as the British debt, and may, when all footed up, reach to three-quarters of that hrag montrosity of national burdens. On the 31st of March, 1865, our debt was officially reported hy the Secretary of the Treasury at the sum of $2,367,000,000. The end is not yet, indeed, hut it is fairly in view, and we have the data for an approximate estimate.

The public debt, on the 25th of April, 1862, was officially stated at $523,299,945; and on the 10th of April, 1863, at $939,497,359—an increase in 350 days of $1,189,135 per diem. On the 26th of April, 1864, it was $1,656,815,105—an increase in 381 days of $1,882,723 per diem. On the 31st of March, 1865, it stood at $2,366,955,077, increasing in 339 days at the average rate of $2,094,808 per diem.

### ESTIMATED AOGREOATE AT THE CLOSE OF THE WAR.

If we take the highest, as well as the latest, of these average rates, as the probable daily accumulation for the remaining term of actual war expenditure, and fix the limit of such maintained expenditure on the 1st of July next, ninety one days after the last report, we have the additional sum of $190,627,528, which will hring the debt up to a total of $2,557,582,605 at the date assumed. And let it be noticed that the statements from which these figures are taken embrace every item of

debt known to the Treasury Department—all bonds, notes, temporary loans, certificates of indebtedness, fractional currency outstanding, and all requisitions of the War, Navy, State, and Interior Departments, lying unpaid upon the Secretary's table. In a word, all the liabilities of the Government of every kind, except claims not presented, arising upon running contracts and services, unsettled or not matured—claims to become debts when ascertained and ready for payment. Those who have the least acquaintance with these unknown prospective claims, will put them at the highest figure that fancy can represent as possible; those who have the best means of forming a judgment hesitate most to name a sum; but we think that the wildest will be satisfied with the addition of the conjectured $442,417,395, which are required to bring the total probable debt to the round sum of $3,000,000,000, when all is settled, known, and provided for.

Here, then, we have firm foothold, and we think, a very liberal margin allowed for contingencies, damages, pensions and benevolences; and we can from this basis of reckoning help ourselves, with a comfortable assurance of safety, to a clear insight into the ways and means of meeting the round total of our engagements in such way as shall at once comport with the welfare of the people who owe this debt, and the just rights of the parties who hold it.

### AMERICAN AND BRITISH EXPERIENCE OF NATIONAL DEBT.

Nothing in our past experience helps much to an adequate comprehension of our present situation, except by the measurement of proportions rendered difficult by a vast difference of conditions. In 1816, we had a debt of $127,000,000, which was an average of charge of $14.67 per head upon the entire population of the Union, and 7 per cent. upon the estimated value of all the property of the people; but our assumed debt of $3,000,000,000 would be 15 per cent. of the present wealth of the loyal States, and $98.62 per head of their population. The debt of the Revolution, and the war of 1812, was wholly discharged in nineteen years from the ordinary sources of revenue; and though within a fraction of half as great a burden upon the capital wealth of the people, was never felt by anybody; and at the end of the term of payment, the first trouble and alarm was from a surplus of revenue of $40,000,000, or one-third of the whole sum which had so long incumbered the Treasury.

### DIFFERENCE OF CONDITIONS.

In the first ten years of that debt-paying period, the wealth of the country grew at the slow rate of 25 per cent.; and in the next decade, which closed the term, at no more than 41 per cent.; while the wealth of the loyal States increased between the years 1850 and 1860 just 126 per cent.—in amount no less sum than $6,000,000,000 or quite double the debt we are now concerned to provide for. The increase of the wealth of the entire Union between 1820 and 1830 did not reach above $800,000,000, so that here there is no parallelism of conditions, and no measure of resources and burdens to be had except by contrast.

In 1816, at the close of her twenty-two years' war with the French Republic and Empire, the British debt was $4,205,000,000. The entire wealth of the United Kingdom was then, according to the received estimates, $300,000,000 less than that of the loyal States in 1860; the charge per head upon her total population was $218.30, and the incumbrance upon the total wealth of the nation 40 4-10 per cent. In the fifty years since the Battle of Waterloo, her wealth has grown at a slow but steadily increasing rate from 20 per cent. in the first to 41 per cent. in the last ten years, that is, increasing in the first decade about $2,100,000,000, and in the last quite $9,000,000,000.

Here we encounter a similar unlikeness of conditions, and a similar change in the rate of progress, as that which we find in the past and present periods of our own fiscal experience. At the rate of increase in the United States between 1820 and 1830, it would have required twenty years to double our wealth, and it now requires twenty years to double the wealth of Great Britain at the rate of her increase in the last ten years; but the loyal States doubled their wealth in eight years and a half of the last decade, and the Rebel States even exceeded this ratio, increasing in the some time at the rate of 9 per cent. and a fraction per annum, and doubling in a little less than eight years.

Still the state of the British debt teaches us this—that whereas it was a burden of 40 4-10 per cent. upon the wealth of the kingdom in 1816, it has fallen, by the increase of the wealth of the nation, to be but 12 per cent. now, although the total debt of that date has been reduced but $250,000,000, or less than 5 per cent.

### DIFFERENCE BETWEEN PRINCIPAL AND INTEREST IN RELATION TO RESOURCES.

The *burden* of a public debt is not at all understood merely by the figures which express its amount, nor by the *per capita* average to population, nor yet by its proportion to the capital wealth upon which it is charged. The payment of the principal is, by the terms of contract, postponed for a longer or a shorter period, and to a Government in good credit, the reimbursement may be further protracted at will, and while thus not demandable by the public creditor, may be treated as a burden in expectancy only, or as though during the interval it did not exist. The annual interest accruing is the form which its actual pressure takes, and until the time of reimbursement it has no other. For all practical purposes, therefore, the aspect which the problem presents is not the proportion of debt to property, but the proportion of the current interest to the current annual product of wealth.

The great bulk of the British debt is in the form of perpetual annuities, having only a *capitalized* principal, which the Government is under no contract to pay at all. The holders of these stocks have no right to demand the principal at any time, and the Treasury may consult its own policy and convenience as to the extinguishment. In effect, our American loans, for fixed teams of years, if the Government chooses at maturity to substitute new stock for them, are to all purposes rendered into annuities while they run; and the inquiry now in hand is only confused by considering the burden of the principal while that principal is not due or payable.

### INTEREST ON OUR DEBT.

On the 31st of March, 1865, the total amount of the interest bearing debt was $1,851,416,370, the annual interest amounting to $102,836,581—an average of 5.55 per cent. per annum. Of the bonds and notes which make the aggregate of the interest hearing debt, 276½ millions are at 5 per cent.; 1,117 millions at 6 per cent.; 156½ millions at 6.46 per cent. (the compound interest notes,) and 301 millions at 7-30 per cent. The compound interest notes will be due in June, 1867, and the 7-30s are payable or convertible into 6 per cents in August, 1867 and 1868. It must be recollectad, also, that the 510 millions of 5-20 bonds, issued under the act of February, 1862, will be payable, at the option of the Government, on the 1st of May, 1867; and the 5-20s, into which the present running loan of 7-30 notes are convertible, will in like manner, be payable in Angnst 1872 and 1873. It is entirely probable that all these stocks will, at the period designated for their optional payment by the Government, be changed, if not discharged, into 5 per cent. loans. We are, therefore, entirely safe in putting the average rate of interest upon our permanent debt at 5½ per cent. per annum, payable half yearly. The average interest upon the total debt, including 515½ millions in greenbacks and fractional currency, is now but 4.35 per cent. per annum. Here, again, allowance is made for the possible funding of this large sum, now bearing no interest, thus overcharging the account of the Government by the amount added for interest on the Government currency, which will most probably be kept in circulation until such time as the revenue shall exceed expenditures.

The actually accruing interest upon the total debt for the current year is, as before stated, a fraction under 103 millions per annum; but to cover the possible additions of the loan now on the market we put it at 126 millions. For the year 1866, we assume the principal at 2,700 millions, and the interest at 148 millions; thereafter the debt is taken at 3,000 millions, interest 165 millions. We are now ready for the question of the

### BURDEN OF THE INTEREST UPON OUR RESOURCES.

The census of 1860 gives us the data for stating the wealth of the loyal States (slaves excluded) at 10,716 millions, and the products of the year at 2,870 millions, or 26.8 per cent. of the capital. We know, also, that the wealth of the loyal States increased in the ten years, 1850–'60, at the rate of 126 per cent. or 8½ per cent. per annum.

Assuming these amounts and rates as a basis, we have, for June 1865, a wealth of 16,112 millions, and an annual product of 4,318 millions, on which the sum of 126 millions of interest would he 2.91 per cent. The like calculation for the period to which the longest of our outstanding 6 per cent. bonds run before they can be converted to lower rates of interest, would stand thus:

| | Int. bearing debt | Ann interest | Millions of Dollars. Wealth | Annual product. | An int. to ann. product per ct. |
|---|---|---|---|---|---|
| 1865 | 2,290 | 126 | 16,112 | 4,318 | 2 91 |
| 1866 | 2,700 | 148 | 17,428 | 4,685 | 3.17 |
| 1867 | 3,000 | 165 | 18,909 | 5,067 | 3 2. |
| 1870 | 3,000 | 165 | 24,218 | 6,490 | 2.54 |
| 1880 | 3,000 | 165 | 48,236 | 12 059 | 1.36 |
| 1881 | 3,000 | 165 | 51,693 | 12,923 | 1.27 |

The increase of the wealth of the loyal States, it will be perceived, is reduced, after 1870, from 8½ per cent. to 7 1-6 per cent. per annum, and the annual product from 26.8 per cent. to 25 per cent. per annum upon the capital.

These rates of production and accumulation will, perhaps, astound European statisticians, and may challenge the wonder of those among us who borrow all their economic doctrine and ideas from transatlantic authorities; but we can say with absolute assurance that they are proved by the most conclusive evidence, in the last ten years of our national progress, and if so, we are fully warranted in taking them as a basis for our estimates of the immediate future. In 1833, Pablo Pebrer estimated the wealth of Great Britain and Ireland at 17,200 millions of dollars; and there is not a respectable authority in the realm that will

question the statement that it has quite doub led since that date. But our own figures depend in no degree or respect upon the estimates of exports. A decennial appraisement of the property and products of the nation, with no other suspicions of error than omissions and undervaluations, in the years 1850 and 1860 respectively, give us the facts of our situation and rate of progress, and we can rely upon them confidently as a minimum exhibit of our economic condition. The census of 1840 was much less complete; but it shows that our advance in wealth in the last decade very exactly doubled upon that of the immediately preceeding one. The best, and the best disciplined, ability of the Census Bureau gives us there results.

PROSPECTIVE RESOURCES.

The burden of interest upon the public debt is here calculated down to the rate of the increase of wealth in the last decade, immediately before the Rebellion commenced. Is this the measure of enhancement for the next 16 years? Let us see: In that last decade nine of our Northwestern States and Territories grew upon the valuation of 1850 full 411½ per cent.—from 452⅔ to 1,862 millions. Four new territories, which had not been reported in 1850, were valued in 1860 at 98 millions; and the still newer ones, Dakota, Nevada, Colorado, Arizona and Idaho, are not valued at all. These last are among the richest in the precious metals, and are rapidly rising into equality of product with California itself, but have no report in our estimates. The Government still holds, in the great West and Northwest, 950 millions of acres of land undisposed of, which are now, at the conclusion of the war, to come rapidly into market, and, what is much more to the purpose, though worth a thousand millions to the Treasury in purchase money, will, after the example of those settled and improved since 1850, rise in taxable value, at an average rate of 455 per cent, and in 20 years increase about thirty times the each value of the property of their occupants; and if every dollar received from the sale of the public domain shall be bestowed upon these new States by the Federal Government in donations to their internal improvement and educational enterprises, the taxable wealth and the resulting revenue in these new States will be thereby only increased in manifold proportion to the investment.

THE MINERAL REGIONS

which invite our disbanded armies, and the still larger hosts of European immigration to open up their treasures, extend through 17 degrees of latitude, and a longitude of nearly equal measure, making an area of more than a million of square miles. They are literally stocked with gold, silver, precious stones, marble, gypsum, salt, tin, quicksilver, asphaltum, coal, iron, copper and lead; asking only an amount of labor relatively equal to that expended on California to yield $400,000,000 per annum in gold and silver alone; and in the other minerals, which will be mined as soon as transportation is provided, at least half that sum. And these things are not merely in the possible of the far future; they are near enough to answer the exigencies of our condition. A population now of 30,000,000, which, during the last half century, has doubled its numbers every 23½ years, with all the industrial enginery and apparatus of the age at command, animated by the spirit of adventure, and spurred by the faith and hope which works wonders, will be found sufficient for the achievement of greater things than we shall need or dare predict.

But great as the promise is in these exhaustless sources of national wealth, our reliance is not alone, nor even chiefly, in the wilderness of our new world. The States called the older of the sisterhood did, in the last census decade, increase their wealth vastly more in amount, and but little less in per centage, than the comparatively new ones. Ohio, first settled 77 years ago apperciated 136 per cent, but New Jersey and Connecticut, both two centuries under culture, enhanced their wealth in as great proportion in the same time; and Pennsylvania made an increase of 96 per cent, upon her large capital of $722,000,000.

PETROLEUM.

From present developments made and making it would seem that this new found tributary of our national wealth is practically inexhaustible. The States of Ohio and Western Virginia are yielding it as freely as Pennsylvania, which has already reached an annual product of 30,000,000 of gallons. The promise of Kentucky is very large, and Southern California gives assuring indications of equal abundance, and even finer quality, at less cost of labor and capital. This oil, already in universal demand, is rapidly being utilized more and more by the improvements made in its manufacture which are bringing even the residum of the earliest processes into service, and fitting all forms of the product for employment in new uses. As for the breadth of the country which holds the supply, it is safe to say that it extends within our own territory from the Allegheny Mountains on the east to the Pacific Ocean on the west; and that throughout an area of 2,000,000 of square miles of our domain, it may be found anywhere, and made available in proportion to the enterprise employed in its development. In measure of use, quantity, and value, it may be classed with our iron mines and mountains, our coal measures, our salt, lime, marble, and all the known varieties of useful minerals; each and all laid up in reserve, without any other limit of enriching products than the demand we shall make upon them.

Such, briefly, are our mineral resources, the chief material of manufacture. The supplies of which the surface of our territory is capable are, in like manner, unlimited in quantity and variety. Put but 60.000,000 of population upon the soil, and divide their industries in due and co-operative proportion, and it is entirely within limits to say that we can furnish to foreign commerce, from our surplus, the manufactures and provisions required by the wants of four times our own numbers. And are we not sure of these conditions of such enlarged production in the 20 years before our present debt, under the terms of the contract, becomes payable? In each of the last three scores of years we have doubled our proportion, and the new epoch just opening in our history promises, on the safest grounds of estimation to exceed this proportion within the like period.

REVENUE.

The sufficiency of the wealth, existing and expectant, to support, without detriment to the progressive prosperity of the country, the required revenue, is thus unquestionable. Let us now glance at the ways and means of raising it.

Under our present system of internal taxes, the actual yield is at the rate of $260,000,000 for the current calender year. The cessation of hostilities, which is now to be looked for at an early day, will diminish the receipts from the manufacturers of army supplies while they are changing into new forms of production, but any such temporary reduction in the crisis will still leave a sum which, with the receipts from customs and lands, will certainly afford for the present year an aggregate revenue of $325,000,000. Now, the interest of the debt on the 31st of March last was $103,000,000; and if in the remaining 9 months this form of debt should be increased $400,000,000 at 7.30 per cent. per annum, the total interest will be a fraction less than $126,000,000, leaving of the treasury receipts $200,000,000 for ordinary expenditures.

With peace restored, the civil, military and naval expenditures will not exceed this sum, and the growth of the permanent debt will cease within the conjectural limit we have assigned it. The interest for 1866 will not exceed $148,000,000, if $300,000,000 of the total debt shall so long remain in the form of United States notes. For these and the following years, for which we have assumed $155,000,000 as the maximum annual interest, we have provision in the well-assured increase of the revenue from taxes, customs, and land sales, as will presently appear.

ADDITIONAL SOURCES OF REVENUE—EXPORT DUTIES.

An export duties upon the cotton, tobacco and other staples of the reconstructed Union, for which we have the command of the world's market, is not only an ultimate reliance but a near probability, and can be made to pay from $60,000,000 to $100,000,000 a year, without detriment to any American interest.

REVENUE FROM THE SOUTHERN STATES.

Nothing of this has entered into any of the preceding statements or estimates; but a duly proportioned amount of excise and assessed taxes from the restored insurgent States must not be overlooked. Their wealth, in 1860, was $3,467,000,000 nearly 25 per cent. of the wealth of the entire United States. That they shall contribute in something like that proportion in relief of the public burdens, is clear as matter of right, and is, indeed, a constitutional obligation of all the members of the Union; nor is there ability in anywise doubtful. Whatever of enchanced cost or diminished quantity of production may occur in the earliest year of the restoration, will be borne by the consumers of their staples; a state of things, however, that can last for only a very brief period; for there is no product of agriculture that expands so rapidly as that of cotton. In the five years from 1855 to 1860, they doubled their product. It can be restored now in less time, and then advanced upon at the like rate; for they are soon to set forward in a career of prosperity unparalleled in all past experiences. The Rebellion has disburdened them of an incubus. They have at command all that the temperate climate affords, with semi-tropical added. They lack nothing but the population, enterprise, and diversified industry of free institutions, and these are brought to them by the new order of things.

We say again, give us but 20 years to realize the promise of our means and conditions, and the United States will stand ready, with a population of 60 millins, and a wealth of not less than 60,000 millions to meet the current burden, and discharge the total debt of the nation. England, with half this amount of wealth, now feels that her still larger debt has dwindled from 40 to 12 per cent. of her property. Ours then would stand at but 5 per cent. of our capital, though undiminished in amount in all that period.

INTEREST OF THE DEBT AND ORDINARY EXPENSES FOR THE NEXT SIX YEARS.

The following tabular statement shows the

result of our inquiry as to the ability of the Loyal States to provide for the interest of the public debt, and the ordinary peace expenditure until the year 1870:

| | Millions of Dollars. | | | | | P. ct. of an rev. to an. product |
|---|---|---|---|---|---|---|
| | Wealth. | Annual propduct. | Ann. inter. est. | Ann. rev required. | An. peace ex- pendi- tures. | |
| 1865 | 16,112 | 4,318 | 126 | 325 | 199 | 7.55 |
| 1866 | 17,428 | 4,685 | 148 | 348 | 200 | 7.42 |
| 1867 | 18,809 | 5.067 | 165 | 365 | 200 | 7.23 |
| 1868 | 20,516 | 5,498 | 165 | 365 | 200 | 6.63 |
| 1869 | 22 240 | 5,965 | 165 | 365 | 200 | 6.11 |
| 1870 | 24,226 | 6,492 | 165 | 365 | 200 | 5.62 |

Note.—The revenue for the calendar year 1865 is an estimate made upon data well ascertained. The peace, or ordinary expenses of the year, is the balance left for such use after payment of the accruing interest.

PAYMENT OF THE DEBT IN 20 YEARS FROM 1870.

It is assumed that, by the year 1870, the insurrectionary States will be fairly under the Federal Government, and in condition to contribute their due distributive share to the revenue of the Union, and that in that year the reduction of the Public Debt may be commenced. The following table, issued by JAY COOKE, the General Subscription Agent of Government Loans, shows the wealth of the restored Union; its annual products; the annual interest upon the debt while in progress of extinguishment, the percentage of annual product which may be applied in payment of the debt; the percentage of annual product required for ordinary peace expenditures (the amount of which is taken at 200 millions from 1870 to 1880, and thereafter at 250 millions, per annum); and the total charge per cent of all disbursements until the debt of 3,000 millions shall be reimbursed.

RESOURCES OF THE RESTORED UNION—ANNUAL CHARGE REQUIRED FOR EXTINGUISHMENT OF THE DEBT IN TWENTY YEARS.

The wealth of the Union in 1870, is obtained by taking that of the loyal States, according to the rate of increase for the ten years before the Rebellion, and adding thereto 25 per cent. for the wealth of the Rebellious States, instead of 33⅓ per cent, which was their proportion in past times. The rate of increase for the ensuing years is calculated at 7 1 6 per cent. per annum, or 100 per cent. in 10 years. (It will be recollected that the rate before the Rebellion was 8½ per cent. per annum, or 126 per cent. in 10 years The annual product is also reduced from 26.8 to 25 per cent. of the capital wealth of the year.)

| | | | | Charge p. c. upon an. product of the Union. | | | |
|---|---|---|---|---|---|---|---|
| | Millions of Dollars. | | | | | | |
| Year | Wealth. | Annual Pro- duct. | An. Inter- est. | Of annual interest. | Of payment of princip'l. | Of peace expenses. | Of total re- quired rev. |
| 1870 | 30,282 | 7,579 | 165 | 2.18 | 1 | 2 64 | 5 82 |
| 1871 | 32,452 | 8,113 | 160.1 | 1.97 | 1 | 2.46 | 5 43 |
| 1872 | 34,777 | 8,694 | 155.6 | 1 79 | 1 | 1.39 | 5.09 |
| 1873 | 37,289 | 9,347 | 150.1 | 1.62 | 1 | 2.14 | 4.76 |
| 1874 | 39,940 | 9,985 | 145.8 | 1.46 | 1 | 2.00 | 4.46 |
| 1875 | 42,803 | 10,701 | 140 3 | 1.31 | 1 | 1.87 | 4.17 |
| 1876 | 45,870 | 11,467 | 134.4 | 1.17 | 1 | 1.74 | 3.91 |
| 1877 | 49,157 | 12,289 | 128.1 | 1.04 | 1 | 1.62 | 3.66 |
| 1878 | 52,680 | 13,170 | 121.4 | 0.92 | 1 | 1 51 | 3.43 |
| 1879 | 56.455 | 14,114 | 114.1 | 0.81 | 1 | 1.41 | 3.22 |
| 1880 | 60 504 | 15,141 | 106.4 | 0.70 | 1 | 1.65 | 3.35 |
| 1881 | 64,904 | 16,226 | 98.1 | 0.60 | 1 | 1.54 | 3.14 |
| 1882 | 69,555 | 17,380 | 89.2 | 0.51 | 1 | 1.43 | 2.94 |
| 1883 | 74,539 | 18,635 | 79.7 | 6.43 | 1 | 1.34 | 2.77 |
| 1884 | 78,881 | 19 970 | 69.5 | 0.35 | 1 | 1.25 | 2.60 |
| 1885 | 85,606 | 21,401 | 58.5 | 0.27 | 1 | 1.17 | 2.44 |
| 1886 | 91,740 | 22,935 | 46.5 | 0.20 | 1 | 1.09 | 2.29 |
| 1887 | 98,314 | 24,578 | 33.9 | 0.12 | 1 | 1.02 | 2.13 |
| 1888 | 105.370 | 26,340 | 20 4 | 0.07 | 1 | .96 | 2.02 |
| 1889 | 112,910 | 28,227 | 5.9 | 0.02 | 1 | .88 | 1.90 |
| | | 316.262 | | | | | |
| Excess | | 16,262 | | | | | |

One per cent. on 300,000 millions pay $3,000,000,000 the principal of the debt.

It must be noted, however, that the figures representing the per centage of the annual product of the nation's industry required to carry on the Government, pay the accruing interest, and repay the whole principal of the debt, do not express an actual taxation upon the annual products, but upon a sum equal to such product. Much of this expenditure may be borne by export duties, if adopted; some considerable share by the proceeds of the public lands, and a very considerable amount will be raised from miscellaneous sources, which are not taxes.

BURDEN OF BRITISH TAXATION UPON THE ANNUAL PRODUCT OF THE UNITED KINGDOM.

Compare the following statement of the charge of the annual interest and ordinary expenses of the United Kingdom upon its industry, by which her debt has been reduced less than $250.000,000 in 50 years, with the burden upon our growing wealth in the demonstrably practical scheme for extinguishing ours in 25 years from the close of the Rebellion. The British revenue pressing with an average weight of about 10 per cent. per annum for above 30 years, ours declining from less than 6 to less than 2 per cent.

In the four years 1811–14, the average amount of annual revenue raised by taxes in Great Britain, was—

| | | | | |
|---|---|---|---|---|
| | $327,489,291 | equal to 21 | p. ct. of an. | product |
| 1823 | 279,714,100 | " 17.4 | " | " |
| 1833 | 224,415,931 | " 9.8 | " | " |
| 1841 | 233 209.146 | " 10.65 | " | " |
| 1850 | 268,326,707 | " 10.54 | " | " |
| 1859 | 344,784,895 | " 11.15 | " | " |
| 1860 | 340,875,829 | " 10.8 | " | " |

It will be observed that in the scheme submitted for the payment of the national debt, and exhibiting the charge to be incurred in the process, we have allowed the relative percentage of the revenue to wealth to decline regularly to the end. This is done to allow for any possible new debt that may be incurred in the interval. The statement shows that as early as 1877, the productive industry of the Union would bear an additional 50 millions of interest, and in 1885, no less than 333 millions, without carrying the annual charge of the total of such a debt and ordinary expenses above four per cent. upon the annual yield of the nation's capital and labor.

The faith of the nation is pledged for the discharge of all its obligations, its people have passed through a wonderful experience of their financial ability from hope to confidence, and the cautious moderation of our calculations shows that, early and easily, THE NATIONAL DEBT CAN BE PAID.

---

☞ The Supreme Court of Boston has decided that if the conductor of a horse railroad receives pay for the transportation of a box, the company was responsible for its safe delivery, but if no charge was made, and the box, having been placed on the platform, by permission of the conductor, the company would be responsible only for gross negligence if it were lost. The jury returned a verdict for the plaintiff on the ground that she had paid a double fare.

---

The total tonnage of Pittsburg for 1864 is divided among 51 packets with 13,676 tons, 38 rowboats with 3,261 tons, 17 barges, 1,697 tons, 32 canal boats, 1,231 tons, 43 flats, 1,905 tons, and 8 keel-boats, 646 tons, giving a total of 921,915 registered tons.

## CONSTRUCTION, TRACTION, RETARDATION, SAFETY, AND POLICE OF RAILWAY TRAINS.

BY W. BRINOES ADAMS.

Wagons and carriages are kept short on railways in order that they may roll round curves. Viewing a train of wagons from a bridge, every wagon will be seen to oscillate from side to side on the rails, following the course of curves and irregularities. Every wagon is drawn by a loose coupling chain, some eighteen inches in length, and the oscillation is so violent that, though goods and coals suffer it, and suffer from it, it would be unendurable by passengers, so the carriages of passenger trains are close coupled together to keep them steady. But in this process the wheels, as constructed, are debarred from following their own courses and are compelled to slide. The result is a a great wear of flanges and of axle-brasses, and a large consumption of coke. Were a train of goods wagons as close coupled as the passenger trains, it would be simply impossible to move them. The first thing an engine-driver does, when about to start a goods train, is to back the whole of the wagons one on to another, and then start them one at a time in succession, by snatch after snatch at each chain, which is therefore required to be of enormous strength, in proportion to the resistance of the vehicle to traction by reason of bad structure.

The necessity for close coupling the passenger trains arises solely from want of the efficient structure to induce free movement to make each carriage tractable instead of resisting—docile and not wilful. The first thing is to attain great length to prevent pitching movement, just as is the case with vessels on water. But with long vehicles, radial movement of the axles must be attained, as described in a former paper. Radial movement may be attained by radial axle-boxes to the end wheels very effectually with one pair or two pairs of central wheels to serve as fulcra on the rails, or with frames of iron fixed to the axle-boxes and guided by the traction rod and buffer. The traction rod in such cases will serve in the same mode as a carriage pole on the highway. And swivelling buffer springs will, by coupling chains attached to the iron frames, keep the wheels in the right position while backing the train on curves. Or, if two pairs of wheels, coupled together at each end of the frame, be arranged with a quadrant or a pivot over one axle and a radial curved bar over the other axle of each pair, they will be self-guided on the rails, and a carriage thirty feet long may thus roll round a curve of fifty feet radius, and the steadier will it run, and the less will be the likelihood of getting off the rails, and moreover the less will be the proportionate dead weight of the vehicles to the available load it carries, if it be rightfully constructed. The Americans and other people use long carriages with swiveling trucks supported on a centre pin, which also have eight wheels, and thus radiate the axles imperfectly, though, if the trucks have not length enough, say two feet more than the width of the gauge between each pair of axles, they will not run steady, but will drag their wheels. If the radial system be applied, it would be quite possible to make carriages forty feet long with eight wheels to roll round a curve of 60 to 80 feet radius. A rough model of a vehicle of this description is on the table, and the guiding apparatus of the wheels is not intended for a bogy carrying the load, as in the American carriages, but simply a radial guide, the load of the upper frames being borne by the springs on the axle-boxes, with facility for elastic sliding, or swinging on long verticle shackles.

Some time hack a series of medical papers appeared in the *Lancet*, on the subject of the injury experienced hy a certain class of patieuts from railway traveling. The fact was strongly denied hy railway authorities, and hy many persons in good health who were not authorities. Not long hack a railway engineer who had been very douhtful of the injury, informed the writer that he had changed his opinion, for, heing out of health, and desiring to travel hackwards and forwards to Brightoo, he found he could not do it on account of the injury caused hy the vihration.

It may he rememhered, that when the Brighton line was first opened, numhers of city stock-hrokers and merchants took houses at Brighton, and yearly tickets to travel up and down daily, in short, to live at Brighton, and transact their husiness daily in London. The writer has heen informed that many ceased the daily practice at the end of the month, and at the eud of six months it was found that hardly any could stand it and preserve their health.

Now, what is the reason of this? The carriages were as comfortahle and easy, and as well ventilated, as an ordinary sitting-room when not in motion, and the only difference therefore could be, that the sittiug-room is stationary, and the carriage moves. But what is the kind of movement? There must be something peculiar in it for physicians to order their nervous patients to travel by road, and not by rail. There are two mechanical differences. The road carriage has wheels proper with independent movement and elastio wooden spokes, and elastic springs, and the wheels roll over a rough hut not constantlp hard surface. Riding in an omnihus aloug Cheapside, the rider finds the stone pavement hard and irregular, and the iron pavement much harder, though regular and the iron pavement is the most unpleasant of the two.

The rail carriage has a kind of garden rollers for wheels, and they run on a small but hard iron surface. If the carriage he traveling at a mile an hour, as when starting from a station, the movement is scarcely perceptihle, but when at thirty to forty miles an hour, the vihration hecomes unpleasant to most, painful to many. In slow movement the wheels oan adjust themselves to the rails, and roll or slide easily. In rapid movement they have no time to adjust themselves, hut slide as well as roll with incessant jerking. On very sharp curves the movement is sometimes all sliding.

It is this sliding which constitutes the difference. We may illustrate it as follows: Everyhody knows that the sound of a violin is induced hy ruhhing the horse hair string of a bow over the strings of a violin, hoth heing in tension. But the simple horse hair will not produce the effect. To produce sound the player applies powdered resin to the horse hair to induce friction, and it is the leapiog of thesc particles over the strings that induces the vihration resulting in "sweet noise." Sometimes, tnose who love loud laughter hetter than sweet noise, will, as a practical joke, apply a tallow candle surreptitiously to the horse hair how instead of resin, and then the vihration causing the "sweet noise" is stilled. Now the wheels on a rail are a contact of practically rough surface, which vihrate and induce forsion of the axle, and thus vibrate and jump, and the result is, not "sweet noise," hut very unpleasant noise and jarring, which, if long enough oontinued, makes a nervous passenger ill, aod tends more or less to counteract the peristaltic motion of the intestinal canal. If the rails rnd tires were ouhbed with the tallow candle before alluded to, the vihration would cease, at least till sand eoough had accumulated to counteract the effect of the tallow. But the engine-driver would not approve of this plan, as it would lessen the power of haulage.

How, then, is this vihration to he lessened? First, hy lessening the hardness of the rail, and rendering it elastic. Secondly, by rendering the wheels elastic. Thirdly, hy permitting wheels, or tires, or hoth, to revolve independently of each other. Fourthly, by radiating the axles so that neither on curves nor straight lines will the wheel flanges he ground against the rails. Fifthly, hy efficiently springing the carriages, using a douhle series of springs, as well known in private carriages. Sixthly, interposing a non-vibrating material, such as india ruhber, hetween the carriage hody and frame. Seventhly, hy so constructing the hodies that passengers may stand or sit at pleasure. The hlood cannot circulate freely when in a constant sitting position. Sedentary employment is a common source of paralysis.

The question is that of hrakes in ahsorhing momentum hy friction. When a large mass of material is put in motion, it rexuires at first a much greater amount of power to start it into motion than it does to keep up that motion when speed is attained. The power required to get up the speed is called momentum, and if it he required to stop the momentum it must he ahsorhed hy friction or gravity. If the stopping places of railways were always on ascents there would he no need for hrakes; gravity would supply the place of friction. And if the starting places were always on desceuts, little surplus power would he needed to produce momentum, as gravitation would furnish it. But momentum has to he ahsorhed under many varying circumstances—sudden obstacles to he averted or stopped short of—stoppage at stations—and the descent of long inclines; also the ascent of long inclines, in case of couplings hreaking or wheels slipping.

Iu the early times of trainways, the Convoy (*convoi*) or hrake carriage was used with the train. In the carly times of railways hrakes were applied to first-class carriages, each worked hy a guard, hecause the first-class were the heaviest. But people who paid first-class fares demurred to this, and sliding hrakes were adopted, working on the wheels and axles without attachment to the hody, and thus jar was lessened hut noise was increased, and so the hrakes were traosferred to the second class, and then the old Convoy—the hrake van—was revived, one at the head of the train next the tender, and the other at the tail, and when the train was heavy, one in the middle. But it was to a very small portion of the total weight of the train that the hreak power was applied, and the guards screwed down the hlocks tight, aud so skidded the wheels and ground flat pieces on the tires; and to apply hrakes rightly, every wheel in the train should have a hrake block applied lightly to it, from the engine to the last carriage. The engine should have hrakes passing on hoth rails and wheels, applied hy the driver, through the agency of steam friction, hy simply turning a steam cock, the pressure heing divided hetween the rails and wheels in any convenient proportion. Brakes on every vehicle in the train and on sll the wheels would reduce the pressure required on each to a minimum. The system of "continuous hrakes," as they are called, is applied to as many vehicles as the power used can reach. But the power used is commonly hand-power, and that is limited.

A new mode has lately heen adopted on the North London line, of making the momentum destroy itself. On this line of short mileage and many stations, with frequent trains, it would not he possihle to work the traffic without the means of rapid stoppage, *i. e.*, the utmost rapidity short of concussion. For this purpose, a chain of sufficient strength to draw the whole train is extended heueath and throughout the train. When this chain is drawn straight, the blocks are all on to every wheel, and when the chain sinks into a succession of curves, or hights, hy a weight heneath each carriage, the hreaks are all off. To draw the chain straight, a pair of heavy cast iron disk wheels, with a harrel or drum on their axle, are then suspended in slings helow the last carriage. The guard, by means of a screw, brings these suspended wheels into close contact with the running wheels of the carriage, and the friction causee the disk wheels to revolve hy the momentum, and to wind up the continuous chain on the harrel till it is drawn up straight, and the hrakes are all on, when the disk wheels hegin to slip, and the momentum of the train is ahsorhed hy the brakes. In this mode a train of fifty vehicles may be stopped in as short a space as a single vehicle, the right amount of friction heing applied to each. This arrangement, however, requires either that the chain he carried through the whole train, and accurately connected with the proper lengths of chain to each carriage, the whole train heing pulled close together, or that the hreak-val at one end and the engine at the other, serve as fixed points to lift the counterhalance weights and draw the chain to a straight line. There is no douht of this acting well on trains fitted for the purpose, hut the writer has not yet seen it applied to mixed and irregularly made up trains.

With regard to the application of brake hlocks, there is an advantageous disadvantageous method. If applied to the fronts of the wheels, that is, in the direction of the pulling engine, they do not chatter on the wheels, whether fast, or loosely applied, hut when brought into contact with the hacks of the wheels, they do chatter, till the pressnre becomes very strong, so strong indeed as to skid the wheel. The longer the hlock, *i. e.*, the longer the surface of tire it embraces, the less is the chatter. But it would be far better to arrange the hlocks hetween adjoining weeels, so as to press hoth rail and wheels, and in this mode there would he no chatter.

Dut though the continuous hrakes before described act so well on continuous trains of vehicles, the action depends wholly on the continuity of the chain, as well as quick movement to apply them. If the chain separates, the brake actiou ceases at once, and this on a steep gradient might he disadvantageous. It is, therefore, desirable to have the hrakes self-acting, if possihle, without depending on the human hand, and operating on every vehicle independently of the others—opcrating also instantaneously when required. The writer was led to study this question, owing to the necessity of enahling the hrakes to follow the wheels of radial carriages on curved courses.

To put this in practice, hrake hlocks are suspended from cross shafts attached to frames resting on the axle-hoxes of the wheels. To these blocks long weighted levers are fixed, which cause the hlocks to press against the wheels with either a steelyard action, or what is called an elbow joint, four hlocks being used, one to each wheel, with two levers or rods to cross bars. Thus the normal condition of the hlocks is, to he pressing on the wheels with a power sufficieut for the purpose. The lever ends are attached to the brakes rod by a chain passing hetween two pulleys on the carriage frame, and as in the process of traction the rod moves lengthlong in the carriage to either end, the chain lifts the levers vertically, the traction force of each vehicle heing sufficient for this purpose, and this process operates on every vehicle so fitted, even though ordinary vehicles he interspersed in ths train; and in ascending an incline, if a traction coupling parts or hreaks these self-acting brakes will instantly press on the wheels before hack movement of the wheels can commence; and in going down hill the hrakes will he lifted while the engine is pulling, hut will he in action directly the

engine is slowed, and they may thus go on pressing and lifting, and so moderating the speed down an incline. It may be objected that the power of the brakes might thus be in excess, and so be a disadvantage; but to equalize this, every vehicle is to be provided with a hand lever, which will enable the driver to put temporarily out of action as many brakes as he may choose. leaving in action the number required for his purpose. The model of the carriage on the table is on a length of rail which may be placed on the level. or at angles of one in 1, in 20, 60, 50, 40, 30, 20, and 10. It will be found that brakes so applied, will retain the vehicle on an incline of one in fifteen, and by snatching the brakes rapidly off and on, starting and stopping may be rapidly performed. In practice, the ends of the levers may have sliding balance weights applied, so os to increase or diminish the pressure by the length of the leverage. It must be borne in mind, that the tractive force required to draw the wagon while running, must goveru the weight required to be lifted at the brake levers, and in cases where much weight is needed, the mechanism for lifting must be arrauged accordingly. When the whole of the wheels are provided with brake-blocks, a comparatively slight pressure on each tire will suffice.

The longer the vehicle, the longer may the brake lever be and the more effective will the vehicles be both for goods and passengers. Coal wagons are made short, for the convenience of getting close to the pit's mouth, but the model on the table, representing a wagon 30 feet in length, will roll round curves of 50 feet radius, and by its great steadiness will carry the coal—a very friable substance, with far less breaeage. And a long wagon may be made considerably lighter in proportionate dead weight than two short ones, thus adding to the available load. In these days of competition in coal transit, this is a very important cousideratiou. The self-adjusting brakes described will work equally well, whether the engines he on straight lines or sharp curves, as the levers are arranged to act equally well in either case. And as it is needful occasionally to back the train, for which purpose the brakes must be out of action, this may be accomplished by conuecting the traction rod to the buffer rods or buffers by spring agency, so that the thrust of the eugine may lift the chains and brake levers in succession, and put the whole out of aotion, or they may be lifted by hand levers as at present practised. This class of brakes is especially adapted to steep gradients. There is nothing new in the principle now proposed. It is the safety principle in the cages of mining shafts and on some railways with rope traction.

The last question we have to deal with is what we may call the police of railway trains. This is a question of structure. Trains are subject to catch fire on the roof; passengers may be taken suddenly ill; murders may be taking place, ot other violence, but the sound of the train deadens all other sounds, and neither driver nor guard knows of it. And so there is an outcry for communication between passenger and guard, and guard and driver. And there are propositions for galleries outside the carriages for guards to walk along and catch murderers in the act. It seems to be forgotten that this facility for the guard would also be a facility for the thief or murderer. The practicability of these things is not considered. It is common to talk of the "six foot" between the two lines of rails, as giving ample space for the guard's gymnastics, forgetting that the "six foot" is reduced to two feet by the overhanging carriages, and that two guards on opposite lines would thus come into collision, and, in American phrase, be "rubbed out."

If the guard is to patrol the train, there is but one way of doing it—through the inside—a passage-way through the whole length of the train. Third class would probably not object to this, as they are disposed to be gregarious, and would not object to a guard for policeman additional, but second class might object, and first class assuredly would, on the score that they had paid their money for space and privacy. If it were put to the vote, there is little doubt that the vote would be for privacy and a certain amount of risk, rather than gregariousness without risk. It must have been a matter of observation to those witnessing the starting of trains, how first-class passengers walk along till they find an empty compartment, and failing in this, make for one with the fewest occupants. And second class will do the same.

Were the lines single there would be no difficulty, as the carriages might be widened at least to the full extent of the tuunels, but with double lines the "six foot" is the limit, and sometimes the "six foot' is only five feet, and even less. With the six feet it would be practicable to have carriages two feet wider, provided only that the passengers would consent to have a wire guard to the windows limiting the protrusion of their hands, like the grating to the windows of a Spanish house. With a carriage ten feet wide, it would be quite practicable to have a closed passage in the centre, two feet wide, and compartments for four persons each, thus getting rid of the objectionable centre seats. The external doors would be retained, there would be sliding doors inside opening into the central passage, communicating with end platforms. The second class and third would dispense with the closed passage. Sliding doors, glazed, would prevent the entrance of wind or rain through the central avenues. In this mode, it would not be merely on the guard that the passengers would rely on for protection, but also on the intercommunication with each otber in case of necessity. But if the brakers were all left to the driver, as they should be, the guard would have ample leisure to attend to the police of his train, instead of having his time taken up with the mechanism. Great Western carriages in the first-class are divided lengthlong by a partition with the disadvantage that the compartment next the platform on the near side has to serve as an ante-room to the other. If the carriages were two feet wider this difficulty might be avoided by a central passage. No doubt this might be all very much simplified hy making the whole train a series of open saloons, as in America, but public taste must decide this; and even in America they are now beginning the system of private compartments. With the exception of occasioual alterations at platforms, it would be quite a practicable thing to widen the whole of the existing carriage bodies, by dividing them in the centre longitudinally and inserting the extra width as snips are occasionally dealt with to lengthen them. And there would be one considerable advantage, that by widening the train the length might be shortened, or a larger number might he carried. It may be objected that a small number—four persons—in compartment might involve a risk in plotted crime; but it would be quite practicable to make one side of the vehicle closed and the other open compartments.

As a matter of safety in collision, the larger carriages are preferable, as they do not mount on each other's backs. As regards the expenditure of momentum by sudden stoppage, which throws passengers violently in each other's faces, tho safe remedy would be sitting sideways instead of fore and aft; they would be shoulder to shoulder, and in the safest position; but even in this case it is possible that they would prefer the ordinary position with risk, to side-sitting without risk, at least till they had a practical verification by frontal damage to their persons. The subject is so large that the writer has only dealt with it summarily, but a useful purpose will have been answered should the paper have given new materials for thinking.

In conclusion it will be well to help the memory of the reader by a summary of the various proposition contained in two papers having reference to the amendment of corresponding defects:—

1. Spring tires for the purpose of preventing blows and friction and lessening the chances of the wheels escaping from the rails, a system thoroughly verified in practice, as quadrupling the durability.

2. Systems of an elastic permanent railway, supporting tho rails by continuous elastic bearing, preventing disintegration of the rails as verified by practice.

3. Improved system of fish-joints, duplicating the strength, with elastic fit of ribs and bolts.

4. Radial axle boxes, to enable locomotives of great length to pass round any sharp curve without friction on their flanges.

5. Eight-wheel tank engines for sharp curves of 99 feet radius, long verified in practice.

6. Eight-wheel tank engines, for curves of 99 feet radius, all eight wheels drivers, both on straight lines and curves, by means of superimposed friction-wheels, all capable of retardation by steam brakes, making the whole weight of the engine available for traction or retardatiou.

7. System of V flanges to spring wires working into V grooves of rails, to obtain increased bite for ascending steep inclines, or when starting with heavy trains.

8. System of long wagons and carriages on eight wheels, radial axles, and guided by quadrants, with sliding springs, or long swinging shackles, to roll truly round curves of from forty to eighty feet radius, and provided with self-acting brakes, to prevent accidents on steep inclines—economically and easily carrying large loads.

9. Mode of constructing passenger carriages to give free internal circufation to guard, engine-driver, and passengers without interfering with the privacy of first class passengers.

These priuciples and plans are applicable to all gauges, from 7 ft. to 5 ft. 6 inches light lines.

---

☞Quite a feat was accomplished between Michigan City and Lake Station, on the occasion of the reception of the funeral cortege, which railroad men, if not the general public, will appreciate. At the former place, at which the funeral train arrived at 8:25 Monday morning, Gen. Hooker stepped off to get breakfast, and, while eating, the train left. Major James S. Hopper, train dispatcher of the Michigan Central, at Miehigan City, went to the company's shop and took out a locomotive, which, with the General on board, overtook the train at Lake Station. The distance between Porter and Lake Station, eight miles, was run in the unprecedented time of ten minutes.

---

The Platte County Railroad.—The work of extending the road to Leavenworth is being vigorously prosecuted, with a force of one hundred and fifty men busily employed. There is every reason to believe this important work will be completed hy the 1st of October next. The company are using every effort to accomplish that end, and are entitled to the commendation of every citizen of Leavenworth for their zeal.—*Leavenworth Conservative, 7th.*

## FOREIGN TRADE

### OF THE UNITED STATES.

The following tables and exposition are taken from the report made to Congress on "Foreign and Domestic Commerce." It shows the relative increase and decline of the import trade from foreign countries. It seems that our trade with the north of Europe (Russia, Sweden, Denmark, Scotland, Holland, &c., &c.) has declined; but our trade with England, France, the East Indies, Spain and Cuba has increased. In the future, as we manufacture more for ourselves, our import trade from England will decline also:

For the purpose of this comparison of values, two years better representing the periods may be selected—1828 and 1860—in both of which trade was healthy and importations full, but not excessive. No disturbance of the usual condition of any considerable foreign country existed in either year which could of itself divert trade from its accustomed channels. The total imports in 1828 were $88,509,824, and in 1860 $362,163,941. The re-exports were $21,595,000 in the first-named year, and $26,933,000 in the last named. The following table classifies the details from each country, showitg which have increased and which bave declined, both positively and relatively:

*Countries from which the imports to the United States have positively declined from* 1828 *to* 1860.

| Imports from— | In 1828. | In 1860. |
|---|---|---|
| Russia | $2,788,362 | $1,257,858 |
| Prussia | 136,064 | 36,464 |
| Sweden and Norway | 1,570,788 | 514,191 |
| Swedish West Indies | 375,095 | 18,793 |
| Denmark | 117,946 | 16,509 |
| Danish West Indies | 2,256,123 | 200,416 |
| Dutch West Indies | 478,397 | 395,644 |
| Gibraltar | 666,578 | 65,963 |
| French West Indies | 896,651 | 162,826 |
| Hayti | 1,163,585 | 2,032,723 |
| Canary islands | 222,740 | 18,886 |
| Madeira | 168,810 | 23,773 |
| Cape Verde islands | 70,328 | 51,825 |
| Peru | 921,235 | 308,452 |

*Countries from which the imports have declined relatively to the total imports.*

| Imports from— | In 1828. | In 1860. |
|---|---|---|
| Holland | $1,398,572 | $2,869,959 |
| Scotland | 1,924,020 | 4,607,187 |
| Ireland | 711,041 | 923,726 |
| Spain on Atlantic | 210,684 | 651,694 |
| Portugal | 112,359 | 146,813 |
| Austria | 237,378 | 732,645 |
| Turkey, the Levant and Egypt. | 505,913 | 1,176,650 |
| China | 5,339,108 | 13,556,587 |
| Central America | 204,770 | 311,258 |
| Chili | 781,863 | 2,072,912 |
| Sicily and Italy | 1,607,417 | 4,734,518 |

*Countries from which the imports have positively and relatively increased from* 1820 *to* 1860.

| Imports from— | In 1828. | In 1860. |
|---|---|---|
| Hamburg and Bremen | $2,644 392 | $18,498 607 |
| Dutch East Indies | 113,462 | 882,803 |
| England | 30 476,129 | 133,065,571 |
| British East Indies | 1,542,736 | 10,692,342 |
| British West Indies | 123,206 | 1,934,749 |
| Canada and the provinces | 447,669 | 23,851 381 |
| France on Atlantic | 8,486,427 | 39,450 865 |
| France on Mediterranean | 914,427 | 3,768,864 |
| Spain on Mediterranean | 421 476 | 2,395,457 |
| Philippine islands | 69,321 | 2,886 166 |
| Cuba | 6 123,135 | 34,432,276 |
| Porto Rico | 1,129 130 | 4,512,975 |
| Azores | 70,328 | 355,551 |
| New Granda and Venezuela | 1,484,856 | 6,727,032 |
| Brazil | 3,097,752 | 21,214 803 |
| Buenos Ayres | 317,466 | 4,020,848 |

The proportions of general increase were a little more than four in 1860 to one in 1828, both being above the average of the general, series, and representing two conspicuous points of full and legitmate trade.

The countries from which importations have either positively or relatively declined, are generally those which produce and export crude articles, the exceptions being the countries producing sugar, coffee and tea. The produce of these last has been immensely stimulated hy the growth of population in the United States and the ease of living, and consequent changed habits of the people. This maintains a demand so large that the carriage of supplies is not so easily diverted as in case of crude articles which are the elements of manufacture. It is these last which we are losing chiefly, and of which the loss is important for other reasons than the mere profit of the carrying trade.

It must he observed that these statements refer only to the direct trade form the countries named, and include none of the importations of the products which reach us through other channels. A large and steadily increasing volume of such direct trade has long existed. The products of Russia reacb the United States by way of England and the German states, as do those of Sweden and Norway. Indeed, tropical products and special exports of the entire list of countries with which our direct connection appears to have declined, are now brought through the channels named in large proportions.

## JOURNAL OF RAILROAD LAW.

### DAMAGES FOR LOCATION AND CONSTRUCTION OF RAILWAY.—TITLE OF OWNERS WHEN TO BE OBJECTED TO.

The late case of Church against The Northern Central Railway, on *certiorari* to the Common Pleas of Cumberland County Pennsylvania, was a proceeding hy one Juliann Church, in her own right, and as administratrix of one Mary V. Church, deceased, against The Northern Central Railroad Company, under certain act of the legislature of that State, passed February 19th, 1849, and providing for the assessment of damages occasioned to the owuers of lands, hy reason of the opening and construction of certain railroads.

In her petition she set forth: "That before and at the time of committing the acts and trespasses thereinafter mentioned, she was the owner of one-third part of the estate descended to her, at and on the decease of her daughter, the said Mary V. Church, deceased, of and in the two tracts of land situate in the township of East Pennsborough, in the County aforesaid, a particular description of which is set forth in her petition. That her daughter Mary V. Church, who died intestate, was in her life, and at the time of committing such trespass, the owner of one-fifth part of the same two tracts of land; and that letters of administration on her estate had been issued in due form to the petitioner. That the Northern Central Railway Company, by its superintendent, engineers, agents, and workmen, entered on the same two tracts of land, and surveyed and marked the route of a railway, and constructed the same upon and through the said two tracts of land, whereby great injury, loss and damage had heen done to the petitioner, and to the said Mary V. Church in her lifetime; and that the petitioner, in her own right, and as administratrix aforesaid, could not agree with the said company for the proper compensasion for the damage aforesaid done to the petitioner, and to the said Mary V. in her lifetime; and therefore prayed the court to appoint viewers," etc.

Thereupon the court appointed viewers and issued the usual order according to said act of the 19th February 1849, appointing therein the 22d day of September 1859, for the meeting of the viewers, on the premises, notice of which was given to the defendant and viewers. The viewers met at the time mentioned, and, without entering on the view adjourned to the 27th day of October following, on which day they viewed the premises injured, etc., made their report in favor of the petitioner, and filed it the 14th day of November succeeding. On the 22d day of said November, the defendant filed twelve exceptions to the report; bnt as the court only decided or passed upon the 3d, 4th, 6th and 11th, complaint of its action or decision was made only as to them.

Tbe court considered the 3d, 4th and 6th together, and the sum of them was that "the petitioner had no such title to the premises as set out in her petition; she was not the owner of the one-third part of the land, and that Mary V. Church was not, and had not heen in her lifetime, the owner of one-fifth part of the land described." In the 11th exception the defendant alleged that there was a former recovery of damages for injury to the premises —(which were paid) by the guardians of the minor children of Henry R. Church, deceased.

The court helow, on a bearing, set aside the proceedings, whereupon an appeal was taken to the Supreme Court of that State, after which the following opiuion of that court was delivered hy

THOMPSON, J.—It is contended by the counsel for the plaintiff in error, that the action of the court helow was erroneons, and that the only remedy for errors not appearing on the face of the proceedings, was hy appeal under the act of 27th of April 1855, which provides for an appeal in proceedings thereafter instituted under the act of 19th February 1849, and that the *quantum* of title in the petitioner could only appear by evidence *dehors* the record. It is difficult to see how this can be successfully gainsayed. The act of Assembly and the practice under it, requires only that the petitioner set forth that he or she is the owner of tbe premises alleged to he injured, as was done here. We think that if the party against whom the application is made, does not, at the time of the application for the appointment of viewers, object to the *quantum* of interest of title set forth by the petitioner, he is concluded as to that matter, unless there is a special right of inquiry into it given hy statute, or he takes an appeal, when the trial heing according to the forms of the common law, the whole case will he passed upon *de novo*, and can be fully brought up for review, if deemed expedient.

When the court acts summarily, and sets aside proceedings on evidence *dehors* the record, the ground of decision can not be legally known to an appellate court, for no bill of exceptions is allowable in such a case. Harris, 363, 9 id. 105. In such circumstances it can not he known whether the judgment pronounced was sound or otherwise, judicial or arbitary. The maxim "*omnia presmuntur rite esse acta*" is applicable to the judgments of courts, but it ordinarily applies to matters

of form and order, which often are, if not always, the guardian of rights as well as principles.

Here there is no presumption of law sufficient in itself to sustain the court in setting aside these proceedings, and no exhibition of evidence of which we can legally take notice, authorizing it. The proceedings including the report, being regular on their face, and there being nothing legally impeaching them, it was error to set them aside. The remedy in such a case was and perhaps is, by appeal.

The plaintiff in error denies that there is anything in the petition, or in any other part of the record, to show that Mrs. Church was only entitled to dower, and not an "owner" of the interest described in the petition, or that if she had but a life estate, that the damages were not predicated of the exact extent of interest. There is certainly nothing to overthrow this position on the record. Indeed, even if it had appeared that it was only as widow she was claiming, it does not appear in any way that the lands out of which she was claiming dower, her husband had died seized of. If he did not die so seized, then her interest would be realty, 2 Jones, 154. So that, granting that the estate which she claimed damages for injury to, was dower, still her proceeding may possibly have been strictly right. It doubtless, however, appeared to the court, by admissions or evidence *dehors* the record, that he interest was in some way different from what it was set out to be, but we have nothing of this before us on which to support the decision below.

The proceedings of the court in this case were like arresting a judgment, where the *narr.* sets forth a good cause of action, on evidence to the court, to show that the facts alleged were not true. To the decision of a court arresting judgment, a writ of error lies. 4 Yeates, 375; 2 S. & R. 392; and if arrested in any such way, the action of the court would certainly be reversed.

The proceedings set aside being regular, we must for the reasons given reverse the order of the Court of Common Pleas setting them aside, so that they may be reinstated and proceeded in according to law.

Order setting aside proceedings reversed.

## STATISTICS OF KENTUCKY.

We take the following article from the *Cincinnati Gazette*. It is a part of the report of the Tax Commissioners, and shows that in Boone county, of which this return is made, the war has produced no injurious effects:

Two prominent facts developed in the report of 1865 will arrest the attention of all, viz:

1st. That in a total of 1,291 slaves in the county returned by the Commissioners as of "no value," his judgment is sustained by the Board of Supervisors; and,

2d. That in the midst of the last struggles of the "wrestle of the giants" for mastery, the increased annual accruing value of the land of the county more than quadrupled all the losses on personal and chattel property during the year. Let these pregnant facts go on the record as an admonition to the Legislature of the State, which is shortly to reassemble, to take prompt and efficient action to rid the State of an incubus which is now paralysing its industrial energies, checking its growth by immigration, retarding the development of all its great mineral resources, and blighting the educational efforts of its best citizens.

| | No. Acres. | Value in 1864. | Value in 1865 | Inc. Value. | Dec. Value. |
|---|---|---|---|---|---|
| Land.... | 152,918 | $3,360,030 | $3,593,250 | $233,220 | ..... |
| T. Lots.. | 490 | 123,200 | 118,130 | ..... | $5,070 |

CHATTELS.

| | No. | Value in 1864. | Value in 1864. | Dec. Value. |
|---|---|---|---|---|
| Slaves, 1864..... | 1,787 | 24,463 | ..... | $24,463 |
| " 1865..... | 1,291 | ..... | ..... | ..... |
| Horses, 1864..... | 4,468 | 230,507 | ..... | ..... |
| " 1865..... | 4,336 | ..... | $211,045 | 19,462 |
| Mules, 1864..... | 801 | 37,240 | ..... | ..... |
| " 1865..... | 632 | ..... | 32,240 | 5,000 |

AGRICULTURAL PRODUCTS.

| | 1864. | 1865. | Inc. Qu'ty. | Dec. Qu'ty. |
|---|---|---|---|---|
| Hay, tons..... | 3,0 3 | 4,296 | 1,293 | ..... |
| Corn, bush..... | 737,340 | 800 220 | ..... | 137,120 |
| Wheat, bush.... | 124,689 | 76,045 | ..... | 48,044 |
| Tobacco, lbs.... | 1,402,700 | 4,716,500 | 3,313 800 | . ... |

| | |
|---|---|
| Number of children reported in 1864 between the ages of 6 and 18. ..... | 2,563 |
| Number at public schools in 1864. ..... | 1,9-5 |
| Number of children reported in 1865 between the ages of 6 and 20..... ..... | 2,865 |

It is proper, perhaps, to say, that where a valuation is given the commissioners adopted a specific standard.

☞ The assessment of the property of the Hamilton & Dayton Railway, was fixed by a committee of the County Auditors of the several counties through which it passes, as follows:

| | |
|---|---|
| Real property..... | $1,191,945 00 |
| Rolling stock..... | 381,950 00 |
| Movables ..... | 82,820 64 |
| Total..... | $1,656,225 64 |

FREIGHT SHIPMENTS.—To show the quantity of shipping which the trade to territories will give to the Pacific Railroad from St. Louis to Kansas City, the *Democrat* says that the returns of the amount of freight forwarded from Kandas City, Leavenworrh, Atebison, Nebraska City, St. Joseph and Omaha, was over 36,074,249 pounds in 1860, and the number of wagons was nearly 7,000; and that this record for 1860 may be trebled for 1864, as last year's emigration across the plains was the largest ever known, and the prospect is that a still heavier rusb will he made this season.

☞ The *St. Louis Dispatch* makes the folluwing summary of the railroad enterprises now in progress in Missouri: "It is an interesting and most significent fact that there is more railroad building going on at this moment in that State than in any other State in the Union. The Pacific road is being extended to Kansas City, and will be wholly completed and in full operation by the first of August next. The Nortb Missouri is being extended to the Iowa Line; the Western Branch of the North Missouri, formerly called the Missouri Valley Road, is being built from Allen, in Randolph county, through the fertile and productive counties of Chariton, Carrol, Ray, Clay and Platte, to Leavenworth. The Platte County road is being extended from St. Joseph northward to the Iowa boundary. In addition to these roads now being built, there are in contemplation the Chillicothe on the Hannibal & St. Joseph road; and the Kansas City and Cameron Railroad leading from Kansas City at the mouth of the Paw River to Cameron on the Hannibal & St. Joseph Road. Outside the State, but still destined to be feeders of its railroad system, are the Kansas City & Fort Scott Road, the Leavenworth and Pawnee Road, and a road leading from Kansas City through Leavenwortb up the west bank of the Missouri to Omaho. Nor must we overlook the Southwest Branch of the Pacific Road, the work on which is for the time suspended, but destined to be resumed and prosecuted till this important road shall be carried into the Indian country.

## THE COTTON SUPPLY.

A correspondent of the Boston *Daily Advertiser*, who has devoted much attention in former years to the compilation of cotton statistics, furnishes the subjoined statement, which will prove of interest to those whose business is affected by the supply of cotton:

There is no positive information to be obtained as to the quantity of sound cotton remaining in the South. Estimates vary from one to five million bales. The most reliable statements which have come to the knowledge of the writer lead him to believe that there were on hand January 1, 1865, not less than 2,500,000 bales of sound cotton, and the large quantities found at Savannah, Charleston, Salisbury, &c., &c., would lead to an increase rather than a decrease of the estimate. In the following table the figures will be based on two and a half million bales of American cotton, and upon the *London Economist's* estimate of the receipts from other countries in the year 1865. The latter estimate is taken because it is the lowest one made in England, and is less than nine per cent. in excess of the actual receipts in England in 1864:

STATEMENT.

| | | |
|---|---|---|
| Feb. 17, 1865—Stock in Liverpool..... | | 557,000 |
| " London..... | | 140,000 |
| | | 697,000 |
| Estimated imports in 1865. | | |
| From United States ..... | 150,000 (438 lbs.) | |
| " Egypt..... | 300,000 (500 lbs.) | |
| " Brazil..... | 200,000 (180 lbs.) | |
| " Peru and West Indies.. | 100,000 (200 lbs.) | |
| " Turkey..... | 100,000 (355 lbs.) | |
| " East Indies..... | 1,500,00 (365 lbs.) | |
| " China and Japan, (two picule to a bale..... | 500,000 (240 lbs.) | |
| Average 330 lbs. each.....2,900,000 | | |
| Deduct receipts to Feb. 17.... 327,000 | | |
| | | 2 573 000 |
| | | 3,270,000 |
| Consumption of 1864 per week.....31,000 | | |
| Rxport of 1864 per week..... .....14 000 | | |
| Deduct per week.. ..... .....45,000 | | |
| Forty-five weeks of 1865, after Feb. 17..... | | 2,025,000 |
| Surplus..... | | 1,245,000 |

The *Economist* estimates an increased consumption in 1865, but it is believed, that with a steadily declining market during a large part of the year, no increase will be realized; nor are the exports likely to increase, as very little cotton will have been shipped to this country, and the continent receives each year a larger direct supply from Egypt, Turkey, Italy, &c.

| | | |
|---|---|---|
| The surplus in England on the 1st of January, 1866, is there taken as above allowing only 150,000 bales from this country... | | 1,245,000 |
| Estimated quantity of sound cotton in Southern States, Jan. 1, 1865.....2,500,000 | | |
| Deduct consumption of the north in 1865 at same rate as in 1864..... | 200,000 | |
| | 2,300,000 | |
| Deduct quantity previously allowed in England..... | 150,000 | |
| | | 2,150,000 |
| Total surplus Jan. 1, 1866.. | | 3,395,000 |
| Weight of above surplus: 1,245,000 bales of 339 lbs. each..... | | 422,055,000 |
| 2,150,000 bales of 433 lbs. each..... | | 941,700,000 |
| | | 1,363,755,000 |

America will surely produce in 1866 as much cotton as our own mills can spin, viz: 800,000 bales; consequently the above surplus will all be available to England and the continent.

The final decline in price will not come so soon as to prevent the planting of a crop in other countries deliverable in 1866 at least as large as in 1864, viz: 800,000,000 pounds.

If only one-half this plant comes to market of 1866, the supply of that year will stand as follows:

| | |
|---|---|
| Surplus previously stated..... | 1,363,755,000 |
| One-half of the plant of 1865–66 | 400,000,000 |
| | 1,763,755,000 |
| Throw aside all the Japan, China, and one-third of the India cotton, as being worthless on account of short staple, say... | 263.755,000 |
| Pounds..... | 1,500,000,900 |

The remainder, being all good cotton, will be a larger quantity than the largest previous receipt in England, viz: that of 1860, when the quantity was 1.417,374,800.

There may even be deducted one million bales of American cotton, but adding the stock on hand in Havre, Trieste, Marseilles, &c., (not less than 100,000 bales), and the direct receipts of the continent in 1865–66, and there will remain a quantity nearly equal to the spinning capacity of all the operatives remaining in the manufacturing districts.

If it were ever safe to draw even a general inference from cotton figures, one would be led to expect a return to old-fashioned prices for cotton, say 10 to 14 cents per pound, during the autumn and winter of 1865–66.

We might also infer a general collapse in the attempt to raise cotton in other countries, and a restoration of our old monopoly, perhaps, to too great an extent, if our legislators shall not unwisely burden the first year or two of free labor cultivation with excessive taxation.

The goose must not be killed even before she has begun to lay the golden eggs. The first cost of reorganizing cotton cultivation must be heavy, and the selling price of the first crop a low one.

After the first depression, a gradual or even rapid rise in price must come, and then, if need be, we can make England pay a good portion of our debt by a heavy tax on cotton.

---

Railway Progress in Massachusetts.—In the analysis of the operation of the railways of this State for the past twenty-three years, there are some striking facts. During that period there have been about a thousand miles of new road constructed; and the cost per mile to-day is about $3000 less than it was in 1842. The receipts, then about two millions of dollars, are now about fifteen millions; the net income has increased from $1,012,000 to $5,313,000. The earnings per mile of road have about doubled; the passengers have increased from four and three quarters millions in 1846, to over seventeen and one half millions in 1864; the freight movement from 1,140,009 tons to 4,954,000 tons. The earnings per mile run are larger than ever before, and the expenses per mile run are likewise larger. The net income per cent. on the cost of the entire system has reached the very handsome figure of 7.04 per cent. After a very liberal expenditure for repairs and reconstruction, and a surplus of nearly $5,000,000 of assets, these figures show that the whole system of railways in this State has been prosperous, almost beyond comparison. —*Railroad Guide.*

## MONETARY AND COMMERCIAL.

There has been no new or exciting feature in the money market, either here or in New York, since our last week's issue. The export of gold from the port of New York last week was unusually large, being $3,042,308, producing a shipping demand for the precious metal; this, however, did not materially affect the rates at which gold was held, the fluctuations being merely the margins of trade. There is but little disposition to speculate in anything, and parties are generally looking to some sort of a change that they at present can not comprehend before they make further venturesome investments. The *Tribune* of Monday says: "Money is more aburdant than ever, and brokers are supplied in excess at 5@6 per cent., and large amounts are left over at the lower rate. The requirements of the stock houses are very small, the whole dealings of the board not equalling in amount a moderate day's work in ordinary times by many single houses." This very clearly indicates the temper of the New York market, with which our own so strongly sympathizes.

The Government having measurably withdrawn from the market as a purchaser of supplies, has materially lessened the demand for a variety of articles, which must be further reduced as soon as the large armies, now on their way home, shall have been disbanded.

The great Iron Works of Corning, Winslow & Co., known as the Albany Iron Works, have notified their workmen that their mills will be closed for several months, thus throwing about six hundeed workmen out of employ. This is much to be regretted, but the unsettled condition of the markets has convinced the proprietors that it is to their interest to do so. The return of the armies will soon furnish a full supply of skilled labor for every department of manufactures and agriculture, and will enable the farmers to get in their maturing crops at less cost than they have been subjected to for a year or two, and enable them to inaugurate the beginning of lower prices, which will finally reach all the departments of trade.

The Exchange market is firm at quotations, and the bank balances at the East are reported as being limited. The following are the quotations:

| | Buying. | Selling. |
|---|---|---|
| N. Y. Exchange. | 50@75c ℘ M. | 1-10c prem |
| Philadelphia..... | 50@75c ℘ M. | 1-10c prem |
| Boston ..... | 50@75c ℘ M. | 1-10c prem |
| Baltimore..... | 1-10c dis. | par. |
| Gold..... | 30@31c prem | 32@33c prem |
| Silver..... | 17@20c prem | 19@22c prem |
| Vouchers, city... | 2@3c dis. | |
| Vouchers, coun'y | 5@15c. dis. | |
| Certificates..... | ½c. dis. | par. |

The New York stock market is not active, the vast absorption of capital by the popular Government loans has drawn attention from other securities. The *Tribune* says: "railway shares are still neglected by the public, and the market is drooping. Erie sold as high as 72 upon the street, but soon fell to 71, and closed at 70¾. The ease in money, large traffic and diminishing working expenses of railroads have little effect in stimulating investment at current moderate quotations, and the Steck Exchange is wholly in control of speculating brokers. Late in the day leading shares were quoted as follows: Erie, 70¾ Michigan Southern, 60¼; Fort Wayne, 93@ 93½. The market closed steady and dull, the transactions being confined almost entirely to Erie."

The annual meeting of the stockholders of the New York and Harlem Railroad, for the election of a new Board of Directors, resulted in the choice of the following-named gentlemen: C. Vanderbilt, W. H. Vandorbilt, W. C. Wetmore, H. F. Clark, A. B. Baylis, Augustus Schell, J. H. Banker, John Steward, Oliver Charlick, John M. Tobin, J. B. Dutcher, A. J. Alkin, and Hiram Cranston. On Thursday, the 18th, the Board of Directors met and organized by electing Cornelius Vanderbilt, President, and W. H. Vanderbilt, Vice-President.

The Directors of the Ashtabula & New Lisbon Railroad have resolved to employ more laborers and push on their road to completion.

Gov. Lewis has appointed Stoddark Judd, Esq., as Receiver of the La Crosse & Milwaukee Railroad Company, under an act of 1864, providing that if the receiver, manager or superintendent of the road did not pay over 12 per cent of the gross earnings of the road as a sinking fand for the redemption of the farm mortgages, the Governor was to appoint a receiver.


## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAIL ROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.
J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

## MONDAY MORNING, MAY 8,

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING ONE THROUGH TRAIN between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at 8:00 A. M.; arrive 8:40 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

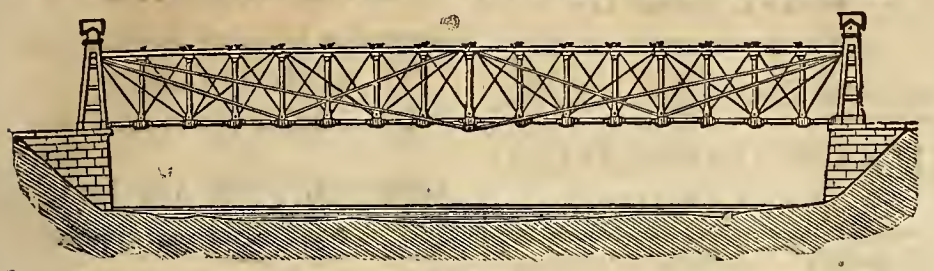
☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '62. ly. Letter Box, 1302. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Sch Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight, as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance-cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive En-

419 y

---

## KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA

---

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

Manner, at horteste, and on th

Most Reas Terms.

---

Manufacturers, Importers & Dealers

—IN—

## RAILROAD, CAR,

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

**MACHINERY OF EVERY DESCRIPSION**

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

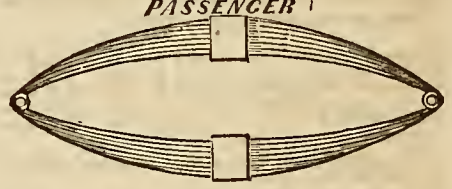
## RAILWAY SPRINGS.

**FREIGHT**

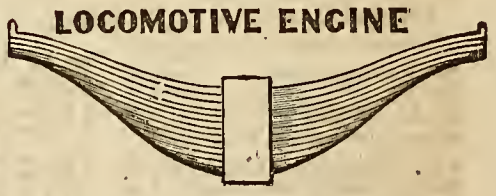




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, an one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI, O.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

## STOCK BROKER,

**No. 21 West Third Street,**

**CINCINNATI.**

Buys and sells Stock. Bonds and other Securities on mission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper'a Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't. Bellaire, O.*
L M COLE. *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads.

Trains run as followa, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

# OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairn | Depart. | Arrive. |
|---|---|---|
| Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairn Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M. & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
General Ticke Agent.

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis. at which place unites with Railroads for and from all points in the West and North-west.

# SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis. Lafayette, Springfield, Quincy, Palmyra. St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD. President.
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, C ncinnati Agent.

# MOSELEY'S

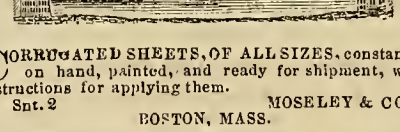
**WROUGHT IRON**

# ARCH BRIDGES

—AND—

# Corrugated Iron Roofs

**ARCHED AND FLAT.**



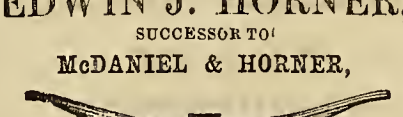
CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Snt. 2 MOSELEY & CO.
BOSTON, MASS.

# EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

# CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

# FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Blonm from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess anperior facili es for forwarding the r work to any part of the country w thout delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

# PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cn to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam. Gas Water, or other purpoaes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purpnses.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches for same. &c.,

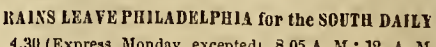
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

# Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**



# FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11.30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East a Wes

WM. TEARNS Supt

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON, } Editors

CINCINNATI:

THURSDAY, JUNE 1, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 8:15 A. M |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| *Atlantic & Great Western—* | | |
| | 8:00 A. M. | 8:40 P M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Daytnn & Sandusky | 7:00 A. M. | 5:45 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond, Chicago and Indianapolis | 7:00 A. M. | 9:45 P. M. |
| Toledo, Detroit and Bellefontaine | 6:00 P. M. | 10:30 A. M. |
| Richmond and Chicago | 7:00 P. M. | 12:35 P. M. |
| Hamilton Accommodation | 11:30 P. M | 6:45 A. M. |
| do do | 7.00 A. M. | 8:05 A. M. |
| Dayton Accommodation | 2:20 P. M. | 9:45 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Chicago and St. Louis Express | 7:00 A. M. | 12:00 M. |
| Springfield and St. Joe Express. | 1:00 P. M. | 5:00 P. M. |
| St. Louis and Chicago Express | 4:00 P. M. | 2:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 4:50 P. M. | 8:35 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:40 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis. Cairo and Louisville | 6:50 A. M. | 1:00 P M. |
| Seymour Accommodation | 3:45 P. M. | 5:00 A. M. |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 7:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 8.00 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:55 A. M. |
| Evening Express | 1:35 P. M. | 6:00 P. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton. Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## THE BROAD GAUGE ROUTE TO NEW YORK.

The readers of the *Record* have observed, from time to time, the progress of the Atlantic and Great Western Railroad, the great energy and unexampled rapidity with which it has been constructed, the rare prosperity with which it has been attended, and the promises of complete success with which it enters upon business. On the 8th of May, the passenger trains commenced running from Cincinnati, under the administration of S. S. L'Hommedieu, its able and estimable President. We have taken advantage of the new route, to take a trip over a portion of Ohio and Pennsylvania we had not previously visited. Some notes of this land voyage may be interesting to those who are unacquainted with the route. We may premise that the entire route is now complete from Cincinnati, *via* Dayton, Urbanna, Galion, Mansfield, Warren, (Ohio) and Meadville, (Pa.) to the junction with the New York and Erie, at Salamanca, (N. Y.) Then, there is a complete broad gauge route from St. Louis to Cincinnati, and from Cincinnati to New York, making in all about 1,200 miles. Considering it as one route, or from Cincinnati to New York as one, (which it is,) there is no parallel to it in magnitude and facilities in this or any other country.

There are two deficiencies in the present arrangements, which the intelligent managers will no doubt remedy at an early day. First, there is only *one* train, so that any failure to meet the train at any point obliges the passenger to lose an entire day, or go by another route. Secondly, the train leaves Cincinnati at 8 A. M., two hours too late, the result of which is that a passenger for New York arrives in the evening, several hours too late. But these defects will soon be remedied; indeed, we are told that another express train is soon to be put on.

Another difficulty may as well be mentioned, although we think it is no fault of this road. The Great Western, and the Cleveland and Columbus roads, intersect at Galion. Of course, passengers from Columbus, or anywhere in the middle of the State, must get on to the broad gauge there; but there is not the least provision for any convenient junction The depots of the roads are a good ways apart, and no understanding exists as to the transfer of baggage. The result is, that if there is not more than the usual time allowed, the transfer cannot be made in season. Fortunately, there is now a quarter of an hour allowed; but the passenger must seek his own mode of transfer. The truth, we imagine, is that the Cleveland road does not feel particularly pleased with the new route; but the Great Western will, we presume, see to it that passengers in future can be readily transferred. It is the interest of all roads to make the transfers from each to each as easy as possible; for in any event they must receive more or less business from each other.

Let us now proceed on the trip. The train now leaves Galion a little after 5 P. M., and owing, we suppose, to some incompleteness of the track, proceeds very slowly to Mansfield, (16 miles,) where just before sunset we get an excellent supper, and see the flourishing town of Mansfield just beyond on the highlands; for it is the misery of railroads to be always passing through the low grounds and suburbs of towns. This is a rich and productive section of Ohio. Some forty years ago, this town, then just beginning, lay amidst an almost unbroken forest, composed of the heaviest and noblest trees in the State. It has since been cleared up, and waving wheat fields and numerous flocks and herds adorn the gentle slopes and uplands of middle Ohio. We pass on to Akron, (Summit county,) reached just at dark; then to Leavittsburg, where we changed cars; and then, as the night passed, on to Warren, (Trumbull county,); and then to Meadville, Pa. Here we got into the oil region, but must reserve a visit to some other period. The Great Western has a branch to Oil Creek, from which it has derived great profit. Everything connected with the oil region is a wonder, perhaps the greatest wonder (except the war) of our times. Where does all this vast quantity come from? And how long will it last? Determine that oil is, like coal, or salt, or iron, one of the natural and apparently inexhaustible elements, and you have a new business whose annual product must be counted by hundreds of millions! But if, on the other hand, it is only an accidental or casual production, and it will, in a short period, cease to be a great business. There is strong reason to believe it will not cease: for, what is coal but a secondary product of vegetables; and if that can be so great and so constant, why not another secondary product? It is a very interesting speculation, both practically and theoretically.

After daylight, we reached Salamanca, (N. Y.) having passed over nearly 300 miles of the Atlantic and Great Western. In that distance, we found the cars remarkably pleasant and convenient, the management of the road good, specially careful of any danger from new constructions, and civil in manner and attention. At Salamanca, we commenced our voyage over the New York and Erie, an old and welcome friend. If our readers have never passed over the Erie Road, they ought to do so for their own pleasure and information. No road in the country presents more various aspects of nature, or more beautiful; and certainly all will acknowledge that the conductors and managers on the line are civil, careful and attentive to passengers. Passing round the eastern end of the beautiful Chatauque Lake, we breakfast at Oleon. What river is that? The Allegheny. Here we are surprised to find that we have been going 500 miles to get out of the Ohio valley,

and here we are on the banks of the Ohio! Yes, the Allegheny is the *true* Ohio; and we are as much on the Ohio at Oleon as at Cincinnati. But here we leave it. Soon we pass into the valley of the Conesteo, then the Chemung, then the Susquehanna, whose waters flow into Chesepeake Bay. Near the sources of the Allegheny, we find springs and summits, whence waters flow into Lake Erie, into Chesepeake Bay, and into the Gulf of Mexico! Wonderful country we have; and how joyful are we that the people who live on theso far streams are still *one*, united people, blest of God to dwell in this beautiful and glorious land. But the cars leave no time to dwell on this. We are passing rapidly through the green fields and smiling towns of the lovely Susquehanna. Soon we begin to climb the rock-built hills where Susquehanna and the Delaware break through the mountain ranges. There, we are startled by that white waterfall, tumbling a hundred feet down into the darkest, greenest glen you ever saw! What bright flower is that? It is the wild honeysuckle, twining through evergreens and rocks! But here we are, after passing through Ohio, Pennsylvania, New York and New Jersey, in the great, whirliug, lamp-lit city of New York.

We close our voyage, with the conviction that no railroad ronte in the country has been opened with greater advantages than that of the broad gauge route from Cincinnati to New York. Its local resources are very great, while its position iu the very heart of the richest country makes it an admirable and desirable through route.

## IOWA CENTRAL RAILROAD.

David Morgan, the President of the above road, in an address to the citizens of Oskaloosa, says that "this road, when completed, will constitute the connecting link between the Railroad system of Missouri and that of Minnesota, thereby opening a highway of travel and commerce not exceeded in importance by any in the entire country West, as will be manifest at a glance at the map of the country, and an impartial investigation of the resources of the different sections through which we propose to build our road. First, it will be seen that our road, with its Northern connections, will reach three hundred miles farther North than the Illinois Central, and while that road stops short of the lumber region, ours penetrates the great pine forests of Minnesota; and on the other hand, by the North Missouri Railroad, we reach the city of St. Louis, which, from its genial climate and central location in the vast regions of the great West, must soon become the crowning glory of central North America. Thus it is apparent that in our Northern and Southern connections, we have advantages not surpassed by any other road; neither does any other Western road have the local advantages which are claimed for ours, viz: South of Oskaloosa we bisect the B. & M., also the D. V. R. R.; North of Oskaloosa, the Iowa Central will cross the M. & N., the C. & M., and intersect with the Dubuque road at Cedar Falls, all of which must act as feeders to the great trunk road running North and South."

## CONSTRUCTION, TRACTION, RETARDATION, SAFETY, AND POLICE OF RAILWAY TRAINS.

BY W. BRINGES ADAMS.

(Continued from page 171.)

*Discussion.*—Mr. Dyer said that they must all feel much indebted to Mr. Adams for his paper, which contained many valuable practical suggestions, but it did not embrace the popular view of the safety of railway trains by night and by day. The popular view was how the safety of passengers could best be secured, and how the casualties of railway traveling could be diminished. With this in view he would call attention to a few statistics taken from the annual reports of the Board of Trade, which showed that there was great loss of life annually throughout the kingdom from railway casualties. Those statistics had been tabulated only since the year 1861, in which year he found that there were 284 persons killed and 883 injured; in 1862 there were 216 killed and 600 injured; and in 1863 there were 184 killed and 470 injured. These figures showed a large amount of loss of life and injury to persons by railway traviling, making a total for the three years of no less than 2637. The question in which the public were interested was, could this loss of life and injury to person be reduced? and in this they were more interested than in the mechanical management or construction of a railway. A great number of lives, he believed might, he saved, in cases of collision, by a contrivance (a model of which he had placed on the table,) and which, he said, would prevent the upsetting of carriages in case of collision. The loss of life occurred, in a great measure, from the upsetting of carriages on the road. If the carriages could be maintained in their proper position, the passengers would seldom suffer more than a violent shaking, but, immediately a collision occurred the upsetting of the carriages ensued, and loss of life and injury to person, to a great extent, was the result. He considered the present buffer arrangements of trains extremely faulty, inasmuch as their line of action was to low, and gave a leverage or pressure, which in case nf collision lifted the carriage over. He held that there ought to be what he termed a square pressure from end to end of the train, which would enable the carriages to sustain the pressure without being upset; in other words, the carriage could he pressed to the extent of the crushing power before it gave way. The arrangement he suggested consisted of a top and bottom line of buffers, which rendered a train like a continuous carriage in point of resistence to pressure from end to end. If the train could be formed of one continuous carriage, upsetting would be impossible, for, however violent the concussion might be, it would be impossible to upset the carriage. The arrangement of buffers he had suggested would practically make the train into a single carriage. Another question was the frequent loss of life that occurred at station platforms. from persons getting in or out of carriages while in motion. He submitted that all the platforms should be built up to the level of the flooring of the carriages, that a dangerous space between the platform and the carriages ought not to exist. There was a great want of uniformity in the height of railway platforms. He found at Charing-cross station, the height of the platform was three feet, while the average height of the flooring of the carriages was about four feet from the rails; consequently, there was an ascent of twelve inches to the carriage. At London-bridge station it was abont the same. On the Brighton line, at London-bridge, the platform was only twenty-four inches in height, which gave an ascent of two feet to the carriages, with a space of eighteen inches between the edge of the platform and the carriages, and this he held was dangerous in the extreme. However thonghtless or stupid the public might be, they found that casualties from falling between the edge of the platform and the carriages frequently occurred to the servants of the companies, who might be supposed to know the danger that existed. Mr. Dyer instanced the casualties that had lately occurred from this cause at the Erith Station, when the platforms were crowded with persons returning from the scene of the recent explosion there. He also quoted from the Board of Trade returns other accidents which he said were merely recorded as "passengers killed from want of caution," &c. He thought the Government ought to instruct the inspectors to inquire into and report the conditions and particulars under which the occurrence took place, but this was not done, except in the more serious cases of accidents. He thought many of the present dangerous arrangements on railways ought not to be allowed to exist, and that it was the duty of the Government, upon the neglect of the companies themselves to do so, to enforce the necessary precautions to ensure the public safety.

Captain Humby could not see the practicability of the arrangement of buffers that had been suggested, to carry out which would involve the necessity of building excessively heavy carriages, whereas it was considered essential, both in regard to speed and comfort in traveling to build them as light as possible. He thought if such a system had come under the notice of Mr. Adams in a way that he could entertain he would have noticed it in his paper, and given his opinion upon it.

Mr. S. Teulon said the last speaker but one had suggested that railway carriages should be provided with two seats of buffers. He would appeal to gentlemen who had any knowledge of mechanics and of the laws of bodies in motion, whether it was not undisputed that the best point at which to stop a body in motion was not as near as possible to its centre of gravity. In the case of an engine with the boiler filled with water, and perhaps carrying a tank on the same frame, he submitted that the line of the centre of gravity was not very far from where the buffers were ordinarily placed. At one time the practice obtained of stopping trains on sidings by the very ready but, as it proved to be, very dangerous method of turniug up the ends of the rails. The consequence of this arrangement was, that as the centre of gravity was above the wheels, they, coming in contact with the bent up iron, had a tendency to be thrnwn out of their places. The remedy for this was found in putting up an earth bank, against which the buffers impinged, and he could state, from his experience on a very large railway, that since that plan had been adopted the injury to the wheels and axles had been largely diminished. In the plan now suggested what would be the consequence of any

thing happening to the lower buffers? If the top buffers took the strain, it would push the roof off the carriage, which, he apprehended, would be very inconvenient to the passengers inside it. With regard to the complaint that the platforms were not placed at a uniform convenient height, it must be remembered that railways were not the system of a day. They had gradually grown up, and improvements had succeeded from time to time. In making a new station, such as the Charing-cross, the directors had adopted a higher platform. The Brighton station was built many years ago, but he had no doubt, when it became necessary to make new stations, the directors of that company would follow the example of their neighbors, the South-Eastern. While speaking of the Baighton railway, he would notice a passage in Mr. Adams's paper, in which he referred to a subject which had excited a great deal of public discussion, viz: the alleged injury to the health of persons constantly traveling by railway. The best answer to that allegation was the fact that, taking the statistics of the Brighton railway, he found a very large increase from year to year of the class of passengers daily traveling to and from Brighton and intermediate stations as season-ticket holders. The report which was distributed among the share-holders of the South-Eastern Railway Company in the early part of this year contained a table, which showed that while in 1855 the season-tickets brought in near £21,000, the amount had gone on increasing year to year, with but one exception, until up to the present year it reached the sum of £34,693. He at one time, as a traveler by railway and road 72 miles, four or five days in a week, fell into the notion that he was being seriously injured by his railway traveling; but he must own now, having continued that injurious practice for upwards of ten years, he had the satisfaction of enjoying much better health than ten years ago. It was fair he should state the result of his own experience. He attributed much of the injury which some passengers suffered to this cause, viz: the short time persons gave themselves to reach the station, which led to their arriving and entering the carriages in a flurried and heated state, unfit for traveling, especially in cold weather. They sat in drafts caused by the carriages moving rapidly through the air, and the caloric of the body was rapidly drawn from the feet, and the proper circulation of the blood interrupted. He turned from this question to the practical matters treated of in the paper. With many of the points advocated by Mr. Adams he entirely agreed. He agreed that a great deal of the mitigated wear and tear of railways and rolling stock was to be attributed to the better form of construction both of the line and the working plant. He had taken a little trouble in this matter since the last meeting, because he held it was of great advantage to discuss these subjects with a number of gentlemen more or less conversant with it, and although they might not agree on alll the opinions expressed, they were in all cases the better for exchanging ideas with each other. In the year ending 1855, on a railway on which 2272 carriages were employed, it was necessary to "turn up" from wear 1884 pairs of wheels. The actual result was .6726 as the proportion of wheels turned up in 1855 whereas for the year ending July last, the number of vehicles having been materially increased, and increased in size as well, the capacity of the wagons being increased from four and five tons to eight tons, they still found this gratifying fact, that the .6796 in 1855 was reduced in 1864 to .6533; and it was an equally gratifying fact that the quality of the tires —a matter on which Mr. Adams properly laid great stress—had very much improved, especially the Staffordshire tires. He found, on a comparison between the wheels used on the two of the large metropolitan lines, that while in the four years ending 1863, when a great many Low Moor tires were used on the one line, the result was a loss of .60945, on a neighboring line with Staffordshire tires it was .60990, being a mere difference of 4-10-000' and showed very favorably for the Staffordshire iron, which, ten years ago, they hardly dare use, as the quality did not near come up to that of Low Moor. With regard to wheels, the railway he was connected with (South Eastern,) gradually, during the last fourteen years, ceased to have perfectly solid iron wheels; they employed wood placed endways above a plate inserted for the centre of the wheel, and built up to form a wooden disk on which the tire was put by hydraulic pressure; they had also done this, and done it very successively, viz: placed a rim of wood between the iron whtel and the tire. He should state that the former plan was patented by Mr. Mansell, the carriage superintendent of the South-Eastern. As the tires had become worn, they had cut of hard wood a segment of an inch or an inch and a half, and placed them between the inside of the tire and the iron forming the old wheel. These plans had answered so well, that whilst during the last severe winter, the tires of 150 pairs of wheels, some on iron, had elongated, where this hard wood had been placed between the tire and the wood of the disk, there was no wheel amiss, a very important matter in times of severe weather. The elongation of tires in winter time had been a very vexed question, but he thought a little consideration would bring them to this conclusion. The road in severe weather, especially if the frost had been preceded by wet, was in its most rigid state. Then the inner portion of the wheel, when of iron, was in effect the same as if the tire was placed between rollers, and consequently it elongated the tire. With reference to the model of an elastic road shown by Mr. Adams, he imagined that was another move in the right direction, and that plan had been adopted on one of the lines running from Manchester. The chairs were placed between the wheels, as in that model, and he stated this on the authority of Mr. Ashcroft.

Mr. Adams—If the plan was good why did not Mr. Ashcroft employ it on his own lines?

Mr. Teulon said it must be well known to Mr. Adams that a framed longitudinal road was formerly employed on the viaduct portion of the Brighton line, and was one of the best parts of the line; but owing to the great number of trains, when it was taken up it was impossible to put down another road like it. It was, however, in use some ten or twelve years with success. With regard to the spring tire wheels which Mr. Adams had shown, he (Mr. Teulon) thought that in ascending inclines difficulty would be found, inasmuch as the wheels would slip in the tire for want of sufficient friction.

Mr. Adams—The objection could only apply to the driving wheels of engines; as regarded other wheels, facility of slip was a positive advantage. As regarded driving wheels positive experiment, which was worth more than any theory, had demonstrated that even when the tires, as stated in the paper, were so loose that they could be moved round by hand (with the weight lifted,) they drew their load perfectly well. Mr. Adams would go further, and say that loose tires, even without springs, would act in the same way, although of course disadvantageously for want of the elastic interception of blows, and the equalizing movement of the tire on its basis of contact with the rail.

Mr. Teulon added that Mr. Adams had stated very correctly that all changes with regard to railway plant, especially with heavy and powerful bodies like engines, must be made with great caution, and therefore he was content to wait on this point till he saw more of the results. In conclusion he would say a word on the subject of the fish joint. He saw by Mr. Adams's previous paper that he did not call in question the fish-joint at present in use, but he said he had got something better. He (Mr. Teulon) thought the public was very much indebted to Mr. Adams for his original fish-joint, and he hoped that gentleman had reaped some of the benefits of that invention. [Mr. Adams—Not a sixpence.] It was a good joint if the fish were properly made, and was one of the best things that had been introduced on railways for a long time. He would not say Mr. Adams might not have improved upon it, but the original joint had been a great advantage to all railways that used it.

Mr. Adams, in reply to the observations that had been made, said the model of the suggested application of double sets of buffers was simply a supplementary mode of attaining what he himself had advocated in the paper, viz: the long carriage. In the early days of railways a single buffer was used in the centre, but it was abandoned for the two side buffers. He did not agree with Mr. Teulon that it was a bad plan to put buffers in the position in which they were shown in the model, because it was notorious that short carriages would ride upon one another's backs. No sooner did they come into collision than, with four tons of buffer springs pressing, the first thing they did was to mount upwards on each other's backs, as they could not move downwards or sideways. That was well known from experience. He did not thing that two sets of buffer springs, one above and one below, were desirable, but he thought it would be an advantage to apply cushioned blocks to the upper corners of the body, flush with the buffer heads when drawn home, to lessen the risk of the tilting upwards. With regard to the question of health, he could not fight against statistics; but in his paper he had alluded to what he understood was the fact, not that season tickets originally taken by gentlemen wishing to travel morning and evening to and from Brighton had been discontinued, but that very few persons could keep up the daily practice; and though the season tickets might have increased in amount *non constat* that all their owners traveled with them morning and night.

Mr. Teulon said his inquiry had been especially directed to that point, and there were persons traveling backwards and forwards continuously.

Mr. Adams was glad to find they had such quality of muscle in England, but one engineer had told him the practice did not suit him. And it was notorious that the faculty discouraged their delicate patients from the use of the railways. With regard to the wheels which Mr. Teulon had alluded to, before that gentleman had gone far in his remarks on that subject, he (Mr. Adams) was prepared with a reason why the wheels on the South-Eastern Railways had lasted longer. It was solely due to the fact that they were wheels with solid wooden disks, which to a certain extent rendered the wheels true cir-

cles, and also removed the inner anvil from the tires. They could not hammer the tire on the surface of the wood as they could on an iron surface, just as the shoemaker in hammering his sole leather could not do it on his thigh as he could on a solid lapstone. As to wooden wheels, nobody knew more about them than he did. He was at one time a manufacturer of carriages and engines, and had turned out a great many of them. There came to him an order from the South-Eastern Company for a number of very long carriages. Those carriages were notoriously the steadiest carriages that ever ran, but they did not answer in one respect, as he had not in them a radial movement of the axles, and the flanges cut against the rails. When the order for them was given, it was specified that the wheels were to be constructed on Mr. Mansell's patent. That patent was not for wood wheels, but consisted in applying, in an ingeneous manner, a pair of angle iron rings which keyed laterally into the groves of the tire, and held to the wheel by cross-bolts through the wood, piercing through the head of the tire. In making a wheel the worst thing they could do was to make a hole through the tire, because it deprived it of a portion of its strength—probably one third. Another thing was, when the tire got loose on the wheel it indicated danger, which arose in this way—where the tire was stretched by the process of rolling over the rails, the wheel being held down in eight points, it could not stretch where it was held but became polygonal in stretching out between them, and the wheel in other parts became a sledge hammer, and in frosty weather, the rivits got broken out. The original wheels of Mr. Mansell were composed not of a disk of wood, but of a series of screw spokes, the outside secured in the felly, and the inside in the nave of the wheel. On looking at that plan, he declined to make such wheels. He was asked how he could do it. He replied, make them solid disks with a series of radial timbers. He was told that was the patent of another superintendent, but he doubted the fact, as it had been done by Mr. Dricks many years before. He (Mr. Adams) had machinery made to cut the timber for those wheels, and they were the first that were thus made for the South Eastern line. He was then putting on Park gate tires, said to be of brittle iron, but he found it perfectly hard, and of good quality. While these wheels were in course of manufacture, an accident occurred on the Midland Railway by the breaking of a tire, which cut through the bottom of the carriage, and nearly killed the railway king, Mr. Hudson. Inquiry was immediately made of the officials whose tire was that had broken? and on being informed it was Park-gate, he issued orders that no more of those tires should be used on any railway of which he had the command. Upon this he (Mr. Adams) was asked if he intended continuing to use the Park gate tires? He replied he did. He was told they would break, to which he replied he was putting them on the wooden disks by pressure, and by no subsequent pressure could there be sufficient tension put upon them to break them. He believed these wheels had never broken a tire. The greater duration of the South-Eastern wheels was, therefore, due to the action of the wood, which prevented the rails and chairs becoming anvils for the tires to act upon. In America Mr. Griggs had put his engine-tires on with wood between the tire and the wheel, and by that means, no doubt, had increased the duration of the tire very considerably; but in the case of a wooden wheel, if the tire got loose by any chance and began to move round, it would soon grind the wood wheel away. With regard to his plan of laying the rails elastically, a few years ago, Mr. Chubb, a director of the North London Railway, complained to him of the destruction of the rails on that line. His reply to that gentleman was, that they did not lay them right, and he offered to give him a plan if he liked to use it. A few lengths were laid down on the North London line with the ordinary rails and in other places. The rails did not touch the longitudinal timbers, and were supported, not by chairs, but by brackets. They had been down three years, but they exhibited no signs of destruction on the top, as was the ordinary result of the anvil action of the chairs and hard ballast. At the time he read a paper on this subject before the Institution of Civil Engineers, it was stated that that kind of road had been adopted before, but he was unable to find any trace of it, in any book or publication, or transactions. It was asserted that it had been done by Mr. Buck, who he admitted was a perfect judge of a good line. He inquired where it had been laid, and was informed on a viaduct; but it had not been renewed on the same plan, and no one knew anything about it except those who laid it down. Mr. Teulon said he got his information from Mr. Ashcroft. Now the latter gentleman was a member of the Permanent Way Company, which had become posessed of his (Mr. Adams's) fish-joint. It was a company got together to secure all that was good in patents of every kind appertaining to the permanent way of railways. Mr. Ashcroft was, he believed, still a member of that company, and had a patent for a permanent way of his own, on which many heavy chairs were used, and it was only natural he should give the preference to his own plan. But that fact precluded either him or Mr. Teulon, who acted under his advice, from being unprejudiced judges of any clashing plan. He gathered from Mr. Teulon's remarks, that he wished, under his information from Mr. Ashcroft, to make it appear that he (Mr. Adams) was not original in his elastic system. But the truth he believed was, that Mr. Buck, a man in his own right and not a copier, did use on a viaduct system of interspacing his chairs between the rigid supports of the frames, to save the viaduct from damage. But in what was called the permanent way of railways, no such system was ever used. He (Mr. Adams) had embodied a known principle of nature to counteract the evil of hard ballast, more than one alluded to by the late Robert Stephenson, in discourses at the Institution of Civil Engineer. Mr. Buck was a man of clear perception, and he also took patents, but never took a patent for this elastic system, or even mentioned it before scientific bodies. With regard to the framed longitudinal road on the Brighton line, alluded to by Mr. Teulon, it was laid with continuous bearing bridge rails on longitudinal timbers. The bridge rails deflected under the wheel and sunk into the timber to an inch or more in depth. An engineer of the South-Eastern line, when he first saw a rail removed asked, very innocently, "Why do you groove your rails into the sleepers?" thinking it had been done from the outset. This line was always harsh and rigid, and not one to be recommended. He (Mr. Adams) had devised a general system, and applied it equally to timber and metal sleepers, to prevent blows and breakage. With regard to the fish-joint, when the original joint was produced, he (Mr. Adams) had not intended it to be used in the way it was now used. It was produced as a parallel support to the rail ends between two chairs, six inches apart; afterwards, for the sake of cheapness, it was proposed to bolt it. The form which was good in the chairs as a parallel fish was not proper as now used. It was notorious that the fishes bent at the joint, and as they had only three inches depth between the two upper tables of the rails, they were not deep enough to supply an equivalent in strength to the depth of the rails. Another thing was, they were parallel, and, being parallel, they added more strength than was wanted at the end of the fish to the rail, and that caused a blow, and less strength than was wanted at the joint of the rail, and that caused another blow. He (Mr. Adams) had now devised another form of fish. It so happened that the Permanent Way Company had made what they called, an improvement in fishes, and probably a dozen patents for improved fishes had since been obtained, and it was certainly competent for him, who originated the fish, to make improvements upon it. He did not think the public were thereby endamaged, nor did he think either the public or Mr. Teulon would desire to dispute his right to make a profit of his further improvements, even though the first fish had yielded a miraculous draft of coin to its possessors. He had seen few fishes of a worse form than the last pattern on the South-Eastern line.

Mr. Davis wished to state that he had had some experience of the engine alluded to in the paper, as having been constructed for the St. Helen's Railway, and was present, in company with the most eminent engineers and locomotive manufacturers, at the trials made with it on the North-London line. When running on a straight line, at a speed of 68 or 70 miles an hour, he was very much struck with the beautiful motion of the axle boxes. Running at that high speed, an inequality of the rails would sometimes cause the engine to give a jump on one side, but it immediately righted itself in the most beautiful manner. After the experiments he examined the wheels, and he noticed that the flangs were not abraded, but the tire had formed a groove corresponding with the surface of the rail. Although the papers of Mr. Adams were very comprehensive, there was one subject which had not been touched on. It had been stated in the discussion that where one carriage ran off the line, if the couplings did not break, the other part of the train would be dragged to destruction. He had brought under his notice a very clever invention, by which the couplings of the carriages were so arranged that, taking into account the sharpest curves, the couplings, by a clever mechanical arrangement, immediately disconnected the carriage from the other part of the train, and saved it from destruction. He thought this contrivance should be more prominently brought before the notice of railway managers than it had yet been.

Mr. Adams said that on the St. Helen's engine they were all spring tires.

Mr. Davis replied in the affimative, and added that he was much delighted with the sensible improvement in the non-vibration of the engine.

The Chairman had great pleasure in proposing a vote of thanks to Mr. Adams for his excellent paper. It was only to be expected that, looking at the scope of subjects embraced in this and the previous paper, difference of opinion on some points would arise. An objection had been taken this evening that Mr. Adams had not cared sufficiently for the public safety in railway traveling. Now if he understood aright the suggestions of Mr Ad-

ams, they went very much in that direction, not ouly by diminishing the wear and tear of railways, hut they had much to do with regard to the safety of the trains. He would not detain the meeting by entering into the fish controversy, but it illustrated the old adage that "there are as good fish in the sea as had come out of it." The first fish, and a good one, had been produced by Mr. Adams, and he was now ready to produce a better. Mention had been made of the safety of railway carriages, arising from their length and breadth, hut no mention had been made of carriages having upper stories. For several years past that description of carriage had been worked on the Bombay and Baroda line, with much success and much safety, and so agreeable had it been found by the passengers, particularly the natives of India, that the company with whlch he was connected (Scinde, Punjaub & Delhi,) had adopted the plan, and used it for a considerable period. He would state as a question of railway management, that they could convey in one of those carrriges very nearly as many as they could in three ordinary carriages. Hitherto no accident had occurred, and the natives infinitely preferred the upper story. As one for many years connected with railways, he would express how gratifying it had been to him to have been present on this occasion, for he felt he had received a great deal of instruction, and it was very agreeable to him to hear that as they gained experience in railway construction the dangers of that mode of traveling were materially diminished.

The vote of thanks having been passed,

Mr. Adams acknowledged the compliment paid to him, and remarked that one element of safety in reference to those carriages on the Indian lines consisted in the gauge of 5 feet 6 inches, which allowed a wider base for the wheels of the carriages. With that gauge they could do a great deal more than with the national gauge of this country.

## THE LEGAL MEANING OF TOLLS UPON RAILWAYS.

Mr. Justice Strong of the Supreme Court of Pennsylvania, in a case in equity, of Timothy Boyle *vs.* Philadelphia and Reading Railway Company, delivered the following opinion March 29th, 1865:

This case presents the single question whether the Philadelphia and Reading Railroad Company have a right, under their charter, to charge, receive or collect for the transportation of property carried by them over their road more than four cents per ton per mile, and more than two cents per mile for conveying each passenger.

The company was incorporated under an act of Assembly passed on the 4th of April, 1833. It was one of the earliest corporations of the kind created in this Commonwealth. The second section of the act gave to it full corporate powers for the purposes for which it was created, with a proviso, however, "that nothing in the act contained should be considered as giving to the said corporation any banking privileges whatsoever, or any other liberties, privileges or franchises, but such as may be necessary or incident to the making and maintaining of the said railroad and the conveyance of passengers and the transportation of the mail, and of goods, merchandise and commodities thereon."

By the eleventh and twelfth sections the company was empowered to locate and construct a railroad from Philadelphia to Reading.

The twentieth section enacted that it should "be lawful for the President and Managers, from time to time, to ordain and establish rules and regulations for the due ordering of all traveling and transportation on the said road, and for its preservation, with power to alter, repeal, enlarge or amend the said rules and regulations, as they may deem expedient," and they should have full powea and authority to prescribe the kinds and descriptions of cars, carriages or wagons, to be used on the said road for the conveyance of passengers and the transportation of the mails, or of goods, wares, merchandise and minerals, and to regulate the speed at which they travel, and to adopt and enforce such rules and regulations in relation to the transit thereof as they may deem expedient: Provided, that the toll on any species of property shall not exceed an average of four cents per ton per mile, nor upon each passenger an average of two cents per mile."

The twenty-fourth section required the company, at the end of the third year after the charter should be obtained, and at the end of every year thereafter, to furnish to the Legislature a verified abstract of their accounts, showing the amount of capital paid in, and the debt of the company, the amounts received for tolls and transportation, and rates charged, and the amounts of dividends declared.

By supplementary acts passed on the 31st of March, 1837, and the 20th of March, 1838, the company was authorized to extend their road from Reading to the Borough of Pottsville, with all the rights, privileges and immunities secured to them by law on other parts of their road, and subject to the same liabilities, restrictions and provisions imposed upon them in the first mentioned act.

From the provisions of the acts of Assembly it is plain that the company was incorporated both as a railroad and a transportation company. As a railroad company, they had power to construct and maintain a railroad from Philadelphia to Pottsville, and to charge and receive tolls from those who might transport either merchandise or passengers over it. As a transportation company, authority was given them to transport either passengers or the property of others over their own road, in their own cars and with their own motive power. Both these agencies for transportation, that the company, and that of others using the roadway of the company to transport for themselves, were evidently in the mind of the Legislature. That it was contemplated others besides the company might use the road after its completion, and might transport upon it their own property, as well as passengers, might put cars and carriages upon the road, is beyond question. If not, the entire twentieth section of the original act, the act of 1833, is unmeaning and even absured. The road was to be a public highway, as truly such as is a canal or a turnpike road, though it was placed under the care and management and regulations of its owners. For this reason the company was empowered from time to time, to *ordain and establish* rules and regulations for the due ordering of all traveling and transportation on the road, and for its preservation, and to *prescribe* the kinds and descriptions of cars, carriages or wagons to be used on the road for conveying passengers and transportation of goods, and to regulate the speed at which they shall travel, and to *adopt and enforce* rules in relation to the transit thereof. This means, beyond doubt, regulations for other transporters, not for themselves. It is a grant of power. No such grant was necessary for their own regulation. To *ordain* for themselves, to *prescribe* for themselves, and to *enforce* such ordinances and prescriptions against themselves, if such was the meaning of the Legislature, involves an absurdity. A power to prescribe rules implies a superior and an inferior, a law-giver and a subject. It was, then, traveling by others, transportation by others than the company, which the Legislature had in view when this section was enacted, and it was to this section that the proviso upon which the complainant relies was appended. It was of course an exception from the powers previously granted in general terms, a limitation upon the authority to ordain rules and prescribe regulations for the use of the road by others than themselves. It could, therefore, have no reference to their own transportation of property or passengers. The mischief against which it was intended for a guard is readily seen. Having made all others who might desire to become carriers on the road, subordinate to such rules and regulations as the company should prescribe, it was apparent that they might be driven off by the imposition of exorbitant charges. Hence, for their propection, it was provided that, by the rules which the company was authorized to prescribe and enforce upon such persons, no greater toll should be charged than four cents per ton per mile on property, and two cents per mile for each passenger. The subject matter of this section then was the power and right of the company as a railroad corporation. It has no reference to the company as transporters. As such, it neither confers authority upon them, nor does the proviso impose a restriction.

That the proviso was not intended to limit the charges which the company might make in the conduct of their own business as transporters is deducible, also, not only from the fact that it is a restriction upon the power previously given in unlimited terms to prescribe rules for others, an exception out of what without it would have been granted, but from the other fact that it was *toll* and not freight for which maximum rates were fixed. The Legislature must be considered as having used words in the ordinary signification, and especially so when their technical sense and their ordinary signification are the same. The legal meaning of the word "toll" is, and always has been, well defined. It is "a tribute or custom paid for passage," not for carriage—always something taken for a liberty or privilege, not for a service; and such is the common understanding of the word. Nobody supposes that tolls taken by a turnpike or canal company include charges for transportation, or that they are anything more than an excise demanded and paid for the privilege of using the way. As already said, the Philadelphia and Reading Railroad Company was one of the earliest railroad companies chartered in this State. Before 1833 transportation had been generally over common roads, turnpikes and canals. The common and the Legislative mind were then familiar with what was called tolls. They understood by them sums paid for liberty of passage without more, and this whether due to a turnpike, a canal or a bridge company. Certainly it was never supposed that tolls were a compensation for the use of carriages, for motive power, for superintendence in transet, and for service rendered in transporting, in addition to the liberty of using the way.

That the word "toll" as used in the act of April 4th, 1833, does not mean all *charges* for transportation that may be demanded

when the company furnish the road and also the transportation, is still more plain when it is noticed that the Legislature, by the act itself, have spoken of amounts received for transportation, as different things. The company was required to furnish annually an abstract of their capital and debts, and the amounts received for tolls and transportation and rates charged. Tolls, transportation, and rates therefore, were understood to be not identical. Not the aggregate of receipts was required; but the amounts received from each of the three sources of income; if the company furnished but roadway, the amounts of tolls; if they furnish motive power, in other words, transported, the amount received from that source; if they furnished carriages, superintendence, service and roadway, the amounts of the rates charged. If "tolls" mean every possible charge, the requirement to make return of the amounts received for transportation and for rates charged, was, to say the least, superflous.

I have examined all the Acts of Assembly which provided for the incorporating railroads enacted prior to April 4th, 1833, and in none of them do I find that the Legislature confounded "tolls" with freight or with transportation. In many of them the distinction is very marked. In some there are limits assigned to charges for transportation, but it is always by apt words, never denominating such charges tolls.

For these reasons I am clearly of opinion that the proviso to the twentieth section of the act of April 4th, 1833, has no application to carriage of passengers or property by the company, and that there is no restriction upon the rates they may charge for roadway use and transportation by themselves. Probably it was deemed unnecessary to impose any such restriction. Excessive rates were guarded against by giving to the public a right to put their own cars and vehicles upon the road without danger of being driven off by exorbitant toll; and it was well known that competition in carriage of property was inevitable, because a canal had already been constructed, and was in successful operation between Philadelphia and Pottsville. Still another consideration may well be supposed to have had importance in the mind of the Legislature. It was, in 1833, impossible to tell, from the knowledge then possessed, at what rates transportation of passengers and property upon a railroad could be carried on.

I have been referred here to a number of English cases which, it is argued, show that a different meaning has been given by the Courts to the word "tolls," from that which I think it bears in our act of Assembly, It is urged, also, that these cases, with a few cited from the decision in this country, rule that the company can charge for nothing else than for tolls. I have examined all these cases. They have very little bearing upon the question now before me. The English decisions are upon acts of Parliament—very unlike our act of Assembly. Some of them relate to improvement (canal or railway) companies, which had no corporate right to transport. Their sole function was to make or maintain a canal or railway. They were not authorized to become carriers. Many English railway companies are created which merely own their roads. They are not allowed to be transporters. Of course they could make no charge except for passage over or through the ways constructed by them. They have no claim to anything but tolls. They render no service, and which is not to be overlooked in studying these cases, under the "Railways' Clauses Consolidation Act," section second, the word "tolls" is defined and declared to mean much more than its ordinary legal meaning, and much more than it has ever understood to signify among us.

These cases do show, as do the American cases cited, that a canal or railroad company authorized to build a canal or railroad, and to take toll upon goods or passengers transported thereon, can demand no other tolls than such as are allowed to them by the statutes under which they exist. I do not now call that doctrine in question. Applied to this case it means that the Philadelphia and Reading Railroad Company can not rightfully demand, from those who carry over their road, more than the act of Assembly allows. For the use of their way by others no other tolls than such as are allowed, either expressly or by necessary implication, can be tolerated. The right to charge tolls at all is not expressly given, but it is an inevitable inference from the words of the proviso to the twentieth section.

But it is said the act of Assembly gives no power to charge and collect for transportation, and that the right to charge tolls for liberty of passage excludes any right to demand compensation for services rendered in carrying or for cars and motive power. In support of this is urged the familiar doctrine that corporations have no other rights than such as are expressly given, or given by necessary implication. I recognise the doctrine, and this raises the question whether the right to charge for transportation is necessarily implied in the grant of power confessedly made. It is clear, as I have already noticed, that the defendants were incorporated not only as a railroad company, to prepare and maintain a highway, but as a transportation company. The regulations and restriction of tolls relates to the former exclusively No provision was made respecting rates and charges for their own service as carriers; but the very purpose of their incorporation was that they might carry. How can they carry without compensation? Authorized to engage in a business, it is necessarily incident to their authority, that they have the right which ordinarily belong to such a business. As was said by Chief Justice Taney, in one of the cases cited, "the character must be fairly examined and considered and reasonably and justly expounded. We do not mean to say it is to receive a strained and unreasonable interpretation, contrary to the obvious intention of the grant." To me it seems a most unreasonable construction of the act of 1833, contrary to the intent of the grant, to hold that the Legislature intended to incorporate a transportation company without power to carry on the business appropriate to carriers. Such power is inseperable from a right to demand compensation for their services. The doctrine would lead to most absurd results, and very often defeat the legislative purpose. Can it be that a gas company, authorized to construct gas works and to supply a city with gas, has no right to demand payment for the gas supplied unless the right to demand it is expressly given in the charter? Must a hotel company, authorized to build a hotel and conduct it, receive guests and supply them without charge? Assuredly no. The right to charge is implied in the nature of the business authorized, and I cannot conceive of conducting the business of transportation, without the imposition of rates and charges.

I will, however, pursue this subject no farther. *I am of the opinion that the rates, tolls and charges imposed and collected by the defendants are not greater than they are authorized by their charter to impose and collect.*

The complainant has, therefore, no equitable right to the injunction for which he asks, nor to any relief. His bill is dismissed with costs.

## GREAT—GREATER—NOT VERY GREAT.

The war is ended. The Government has triumphed over all opposition. No one now doubts the ability of the country to reconstruct the entire territory, and establish law and order on a foundation solider that ever before; and no one doubts that a half century of unparalled growth and prosperity is our future. We could go into statistics and show very conclusively that the population of the United States of America will be 100,000,000 in 1915—only 50 years hence, and that the product of the precious metals (gold and silver) from our mines will be $300,000,000 per annum; and that the wealth of the nation, as measured by the great augmentation of specie money as a basis, and specie-paying paper money as an active medium, will be swelled beyond anything ever known on the face of the earth.

From 1850 to 1860 the assessable property of the nation rose from $7,135,000,000 to $16,170'000,000—more than doubled in ten years. The devastation of the Slave States and the wiping out of slaves as property, will leave the nation as regards assessable property, in 1870, about as it was in 1860. From that date it is modest to estimate a doubting in every ten years—say in 1880, $32,000,000,000; in 1890, $64,000,000,000; in 1900, $128,000,000,000; and in 1910, $256,000,000,000.

1½ per cent tax for only one year, or a mill tax per annum for twelve years, would cancel the entire rebellion debt.

We do not mean it to be understood that the property of the nation will actually double every ten years, but that its value in dollars is very likely to overreach the above ratio. How much of this augmentation of valuation will be properly attributable to the augmentation of currency, both metal and paper, is to be taken into consideration. Certain it is that from 1800 to 1850 property was measured by the annual product of gold and silver for the whole world of 33,000,000. For the fifty years to come, property is to measured by an annual product of more than 300,000,000.

Either a dollar must be made to contain more of the precious metals, or a dollar ceases to have any more than a tenth of its former purchasing power. Hence a dollar, for the fifty years to come, is to be of no more amount than a dime was from 1800 to 1850.

Debt is payable in dollars. If dollars are made abundant by a great augmentation of the metal, the burden of the debt is proportionable lightened. The British debt is lightened at the rate of 4 per cent. per annum by Californian and Australian gold. Practically, all debt is in process of repudiation. Those who live on annuities, incomes and salaries, feel this insidious repudiation, without knowing why it is so.

The cry of high prices—fabulous prices, as grandfathers term it—is traceable to the increase of currency, not so much of greenbacks as of yellow boys.

In this train of argument we come to the verdict that our rebellion debt of $3,000,000,000 is no very great debt after all.—*Thompson's Bank Note and Com. Reporter.*

## THE RAILWAYS OF VIRGINIA.

The Richmond (Va.) *Whig* has something to say about the railways in that section, and remarks:

The surging to and fro of the tide of war in Virginia has resulted in the partial destruction of every line of railway in the State. Since the surrender of Lee's army, it has been determined by the Government to reconstruct and repair the most important of these lines, and Brig. Gen. McCallum, Chief Superintendent of the military railroads of the United States, has already begun the work.

The principal of these roads are the Orange and Alexandria road, running from Alexandria through Warrenton Junction, Culpepper, Gordonsville and Charlottesville to Lynchburg, 170 miles; the Virginia Central, running from Richmond through Hanover Junction, Gordonsville, Charlottesville and Staunton to Covington, 205 miles; the Richmond and Potomac, running from Richmond through Hanover Junction and Fredericksburg to Aquia Creek, 75 miles, and thence connecting with Washington by the Potomac river; the Manassas Gap, running from Alexandria through Front Royal to Mount Jackson, in the Shenandoah Valley, 112 miles; the Alexandria and London, running from Alexandria ro Leesburgh, 38 miles; the Winchester and Harper's Ferry, 32 miles long; the Richmond and York River, extending from Richmond to West Point, 41 miles; the Southside, from Petersburg to Lynchburg, 125 miles; the Richmond and Danville, 125 miles; and the Virginia and Tennessee, from Lynchburg to Bristol, 204 miles.

We learn that it is the intention of the authorities first to complete the through route from Richmond to Bristol, by the Richmond and Danville to Burkesville, thence to Lynchburg by the Southside, and thence to Bristol by the Virginia and Tennessee Roads. This route is already under construction, as is also the route from Alexandria to Lynchburg via Gordonsville and Charlottesville, which is to be the next completed. The Richmond, Fredericksburg and Potomac Railroad, from Richmond to Aquia Creek, will then receive attention. This railroad, connecting with steamers at Aquia Creek, was formerly regarded as the most direct route from Richmond to Washington. As it stands, it is, owing to the skill and energy of the officers who have had it in charge, better equipped than any road in the State. Indeed, in point of rolling stock, it is in as good condition as before the war. The greatest obstacle to its being put in running order is the absence of bridges over the North and South Anna and the Rappahannock Rivers. But before the energy of Gen. McCallum, and the great resources of labor and material at his command, the reconstruction of these bridges is only a matter of days.

While speaking of this road, in the repair of which the citizens of Richmond cannot but feel great interest, connecting them, as it does, more directly than any other with the great centres of trade and intelligence of the North, we cannot forego to mention the fact that the preservation of the depots, workshops, and rolling stock of this city, are in a great measure due to the vigilance and exertions of Mr. Wm. N. Braggs, Superintendent of the yard, and Mr. Samuel Ruth, Superintendent of Transportation. On the day of the late memorable conflagration, the depot and the buildings were frequently on fire, but were saved either by the efforts of these gentlemen or under their direction. Mr. Ruth, by the way, was the same who was cast into Castle Thunder by the rebel authorities, about three weeks before the evacuation, on the charge of being a "pestilent Unionist," and communicating information to the United States authorities. He was discharged before the evacuation.

The York River Railroad, it is natural, we should also feel an interest in; but we have heard nothing of the intention of the authorities with regard to it. The greatest expense will be the reconstruction of the bridge over the Chickahominy and Pamunkey. This road shortens by several hours communication with Norfolk and Fortress Monroe, and on this account will, we presume, receive the early attention of the military authorities. Its repair would be of incalculable advantage to the hungry thousands of Richmond, as it connects there with the oyster banks and fishing shores of the Pamunkey, Mattaponi and York Rivers, and penetrates a country abounding with wood, suitable for fuel. But, though we cannot but have special interest in particular roads, we look with feelings of pleasure to the early completion of all the lines of travel which connect the several parts of the State with Richmond, as the speediest means by which all of our citizens can be reunited in a common feeling of attachment and loyalty to the Government.

We have spoken of the railroads diverging from Norfolk, and know nothing of them except that we learn that Mr. Phineas B Thompson, of the United States Military Railways, late from Tennessee, has been ordered to Norfolk, and will immediately take them in charge.

## COMPLETING RAILWAYS.

We may reasonably conclude that our railway system is to be permanent, that it will not be superseded by any other mode of transit for the present century at least, although incidentally many improvements will be added. The better the machine is the more economically it can be worked, and having built the railways substantially, so that they can be worked, we should now see that they are completed so that they can be worked in the most economical manner. Many of our roads are suffering from bad location at particular points, which a very slight change would very much improved. The Worcester road led off in a very valuable change on their line at Brighton, thus correctiug the original great engineering blunder, and the managers of this road are deserving a great deal of credit for their persevering efforts to root out all the original engineering errors, and bring the road up in all respects to the standard of a first class road. All these things cost a great deal of money, but it is a saving in the end where these improvements are made with judgment, and the shareholders will reap the benefit of them as well as the public. The entrance of the Old Colony line into this city was in a most unfortunate location, full of sharp reversed curves, and finally ending in a dark, badly ventilated and otherwise badly planned depot. The able managers of this line have lately had the entire line from South Boston to the depot in Boston re-located, getting rid of the worst features of the original location, besides securing land enough for shops and yards in conveuient positions. No railway company in this city has ever had room enough, and all of them have been compelled to purchase additional land from time to time to keep pace with their actual wants. The Old Colony is likewise to have a new depot, large, comfortable and convenient. These permanent improvements will be as valuable to the company as they will be pleasant to those who patronize the line. No railway can be called complete until the tracks are in good condition, and in this respect many of our roads are deficient. We find in our walks many of the cross-ties want tamping up, chairs are loose and spikes missing. Constant watchfulness on the part of the managers is needed to keep up these little details, which are not attended to if left entirely to the trackmen. More attention should be paid to cross-ties; there is too much irregularity in size and form allowed, and generally they are not long enough to give sufficient bearing outside the rail. Irregularities in the track increase the repair expenses of the rolling stock very materially, besides being a fruitful source of accidents from breakage and running off the rails. We shall have to wait some time before we find a track laid such as we are convinced would be the cheapest in the end, but we wish to see the best use made of such materials as are now in use. The present defects of the track, arising from carelessness and inattention, should be reformed out at once. A more rigid supervision, even if it costs a little more time and money, would be true economy. The tracks of the roads leading from this city compare very favorably with those in other parts of the country, but these might easily and cheaply be made more perfect and complete.—*Railway Times.*

APPRENTICESHIP.—The *Trades' Advocate*, of March 4, has a good article on apprenticeship, recommending a revision of our system, and pointing out the danger that the race of skilled mechanics will die out with this generation. It says that neither employers nor workmen take sufficient interest in the training of boys, who merely have the run of shops, instead of being specially instructed. Only the influx of skilled workmen from Europe has arrested the depreciation that would otherwise have exposed the folly of this course long since. Boys soon claim the wages of men, and employers reduce wages all round. The remedy recommended is a legal apprenticeship, and the sub-appreuticeship of boys to good workmen.

## THE GEORGIA RAILROAD.

Campbell Wallace, the acting President of the Georgia Railroad, offered to return the rolling stock of the East Tennessee & Georgia Road to the Stockholders, at the depot grounds in Knoxville, and to Governor Brownlow, as the representative of Tennessee, to which the Governor made a characteristic reply, from which we take the following:

The East Tennessee and Georgia Railroad, under your *entire control*, was basely prostituted in the cause of treason, and defiantly and boastingly transported rebel troops by thousands, and rebel munitions of war by thousands of tons, your conductors insulting Union men on the cars, and decorating the trains with rebel flags. So far did you carry your proscriptive policy that all loyal men to the United States Government were turned out of employment. The prostitution of that great road for three years to the cause of treason, the running off of its immense rolling stock and its large amount of funds, and the burning of its valuable bridges after you, to say nothing of the wearing out of its stock in

Georgia, in freighting cotton and running the blockade, constitute high crimes in the estimation of loyal Tennesseeans, and cannot now be settled up by the return of a few old passenger cars and trucks, with a few new ones thrown in.

As a candid man, I cannot advise you to return to the depot grounds at Knoxville. Your telegraphed dispatches to Zollicoffer, Vaughn, Bowan, and others, are there, urging the arrest of Union men. Those whom you contributed to imprison are there, and the sons of those who were executed are there, and they will make your old home anything but a "social circle" to you. The proscribed and persecuted members of the Presbyterian Church, against whom you made your pastor, the Right Reverend Mr. Martin, preach and pray, are there, and they will no longer receive the break and wine at the hands of a ruling elder, who is steeped to the nose and chin in the blood of this rebellion!

## NEW YORK RAILROADS.

Wm. B. Taylor, State engineer and surveyor, submitted to the Legislature of New York, March 24th, 1865, the annual report on railroads of the State, as prepared by S. H. Sweet, late deputy State engineer and surveyor, for the fiscal year ending September 30th, 1864, from which we take the following:

| | |
|---|---|
| The number of companies that filed their reports as required by law, for the year 1864 | 116 |
| The number of companies organized under the General Railroad Act, which are exempt from making annual reports to this department | 9 |
| The number of roads, in operation, that are required by law to make annual reports to this department | 59 |
| The number of roads, in operation, using horse power, that are required by law to make annual reports | 20 |
| The number of companies organized during the year | 4 |

STOCKS AND DEBTS.

Roads operated by steam:

| | |
|---|---|
| Amount of capital stock by charter and acts of the Legislature | $73,600,900 00 |
| Amount of capital stock subscribed for | 93,799,407 76 |
| Amount of capital stock paid in by last report | 79,586,515 84 |
| Amount of capital stock now paid in | 92,967,484 83 |
| Amount of funded debt as by last report | 65,715,775 19 |
| Amount now of funded debt | 64,640,431 53 |
| Amount of floating debt as by last report | 654,676 39 |
| Amount now of floating debt | 1,253,852 46 |
| Total amount now of floating and funded debt | 65,894,283 99 |

COST OF CONSTRUCTION AND EQUIPMENT.

| | |
|---|---|
| Total cost of construction and equipment of roads using steam power | $144,264,165 73 |
| Total cost of construction and equipment of roads using horse power | 15,134,727 29 |

CHARACTERISTICS.

Roads operated with steam:

| | |
|---|---|
| Length of roads in miles | 2,821.13 |
| Length of roads laid | 2,511.38 |
| Length of double track, including sidings | 1,131.26 |
| Length of branches laid | 494.68 |
| Length of double track on same | 21.43 |
| Length of equivalent single track | 4,158.05 |

EARNINGS.

Roads operated with steam:

| | |
|---|---|
| From passenger busidess | $13,991,956 67 |
| " freight business | 26,348,384 65 |
| " other sources | 1,466,813 02 |
| Total earnings | $41,807,104 34 |

PAYMENTS OTHER THAN CONSTRUCTION.

Roads operated with steam:

| | |
|---|---|
| For transportation expenses | $29,193,748 82 |
| For interest | 4,509,182 58 |
| For dividends on stock | 5,687.200 48 |
| Amount carried to surplus fund | 1,021,510 86 |
| Total payments | $40,411,642 74 |

ACCIDENTS.

Roads operated by steam:

| | |
|---|---|
| Number of passengers killed | 91 |
| " " injured | 117 |
| " employes killed | 78 |
| " " injured | 31 |
| " others killed | 117 |
| " " injnred | 33 |
| Total number killed | 285 |
| " injured | 181 |

SCOUTING EXPEDITION AGAINST THE INDIANS IN ARIZONA.—The *Arizona Union* (Prescott) of 18th January says:

A series of scouts have been inaugurated by Captain Anderson, commanding Fort Whipple, since the middle of September, and thus far three parties have heen out and returned. The first, commanded by Capt. Anderson in person, succeeded in surprising and killing sixteen Apaches. The next under command of Lieut. Barr, killed four, and the last, which returned on the 14th inst., commanded by Capt. Thompson, killed twenty-eight. Thus every scout, so far, has been a success, and it is to be hoped that this excellent scheme of Capt. Anderson's will be kept up, and be equally successful in the future as in the past. He has done more, during the time he has commanded Fort Whipple, for the suppression of Indian depredations than has been done since the establishment of the post. By next Saturday, or thereabout, Lieut. Barr will make a second expedition, in what direction we are not permitted to state, but from all accounts it will probably be crowned with success. Mr. George Cooler, who has been the guide for all the parties, will accompany Lieut. Barr in that capacity. Mr. C. is well posted in regard to the wild country about us, and has not yet failed to trace the Indian to his rencheria when once on his trail. These expeditions have thus far heen made entirely on foot, as the cold weather and poor grazing have made the cavalry almost inefficient.

THE PERKIOMEN RAILROAD.—The charter of the Norristown and Allentown Railroad Company was amended in several respects by a supplement passed at the last session of the Legislature, and the probabilities now are that the Perkiomen Valley will ere long be occupied by a railroad beginning at a point on the Philadelphia and Reading Railroad, above Norristown, and terminating in a connection with the East Pennsylvania Railroad, six miles from Allentown. The road will be operated by the Philadelphia and Reading Railroad Company, and will establish a short and direct communication between Norristown and Allentown, and between the Schuylkill and the Lehigh valleys.

## THE END OF THE LOCK-OUT IN ENGLAND.

All the puddlers of the Wolverhampton district are now steadily at work, and apparently more satisfied with their condition than they were before the dispute between them and their employers. They resumed their occupations on Tuesday evening, and the renewed fires blazing forth from the furnaces shed a lurid yet a cheerful glare over the broad and sombre expanse of the "Black Country." They were the signs of revival, after long torpor, in a most important branch of national industry, and the harbingers of returning plenty to many a cottage which has recently known the miseries of privation. On Saturday last, there was a conference between a number of iron masters and the representatives of the puddlers, on the proposed scheme of arbitration; and, as the subject was submitted to candid and thorough discussion, both parties arrived eventually at a common understanding and something like a common agreement, and the practical difference between them exhaled into thin air. A more striking example could not be imagined of the superiority of reason over brute force than was exhibited in the proceedings of the meeting which we have referred to. The masters might have treated the men with disdain, and spoken of their arbitration crochet with contempt; and such conduct would have been deemed by most people justifiable under the circumstances, but it would have been attended with no substantial advantages. The men would have gone away filled with anger and bitterness, and impressed with the conviction that their employers were hostile to arbitration, because conscious that their pretensions would not stand fair discussion, and that the only hope for justice to themselves lay in combination, backed by resolution. They would, no doubt, have been constrained in a short time to return to their work, but the spirit of suspicion and insuboration would have been strong within them, ready to burst into open rebellion under very slight provocation and encouragement. As it happened, the masters pursued the opposite line of policy, treated the representatives of the workmen with courtesy, and confronted their crude notions with calm and conclusive argument. The effect was astonishing and decisive, for the men, after doing their best, frankly acknowledged themselves beaten on their own ground, and, after that, there could be no further resistance. To meet the difficulties which the masters had placed before them, it would have been necessary to bring out a properly framed and well considered scheme of arbitration, comprising the necessary guarantees for all parties, as well as the necessary powers for carrying its provisions into effect, and this they were not prepared to do. Ultimately both employers and workmen agreed upon a resolution which expressed their common regret at the unfortunate results of strikes and lock-outs, declared their sincere desire to prevent their recurrence, and pledged themselves to give their best consideration to devise some plan whereby the district should in future be preserved, as far as possible, in quietness and prosperity, and good feeling be mutually maintained. The adoption of this resolution removed the subject of dispute between the puddlers and their employers, and so the great lock-out of iron-workers in 1865 was brought to a friendly conclusion. According to appearances, no root of bitterness now remains, and there is a prospect of a better understanding than has existed for some time past.

Well, *iræ amantium amoris redintigratio est.* The quarrels of lovers lead to the renewal of love, and perhaps the strikes and lock-outs which have lately troubled the iron-making world may lead to greater cordiality among all the parties concerned. Storms are useful in clearing the atmosphere, and contention among friends sometimes disperses serious misunderstandings. A few weeks ago we had to notice dismal disquisitions which appeared in the *Times* and elsewhere, on the awful and widening chasm between capital and labor, and we did what we could towards comforting those who were oppressed with fears on this account, by assuring them that, as neither capital nor labor could do much of itself without the aid of the other, they would manage to move on together, though they might occasionally fall out by the way.—*London Colliery Guardian, April* 22.

## KRUPP'S CAST-STEEL TIRES.

[From American Artisan.]

MESSRS. EDITORS:—An article from the London *Engineer* is "going the rounds" of the American papers, and instilling very erroneous notions on the subject of Krupp's cast-steel in general and tires in particular. Krupp's cast-steel tires are made (as therein stated) "from a solid block," by a process for which he has obtained patents both in this and every European country of importance. If other manufacturers in England, or elsewhere, are making "arrangements" to use his process, he will have to be consulted about the matter, most assuredly. That Krupp's cast-steel tires *never break* is notorious, and equally so is the fact that all others *do* break, including "a considerable number of engine-tires supplied to the London and South-western Railway." Is it not a mistake to assert that *any* cast tires have ever been made by welding? *All* are advertised as having been made "without a weld," or to be "weldless," as some of the newspapers have it. It is not true that the acknowledged excellency of Krupp's tires "depends entirely upon his *method* of making them," and not also upon the *peculiar metal* of which they are made. It is neither generous nor just toward Mr. Krupp to assert that those tires with "a propensity for breaking" can be cured of that defect by being made "without a weld" for it is obvious that they are so made already. What, then, are we to think of the following sentence at the close of the article: "It is not unlikely that—the risk of broken welds being thus removed—they will take the place of all tires now in use"? Of course this must include Krupp's, by insinuation, for they are in the most extensive use of any tires in this country, wherever renewals are required. Many railway authorities have ordered none other for years past. The Erie railway alone has ordered, from first to last, over twelve hundred of them, and now use no other whatever. The same can be said of many other roads.

If cast steel tires have never been made by welding (which is certainly the case with all that have been advertised in this country,) then it follows that the cause of the risk of breaking is in the metal itself, as none made of Krupp's *peculiar* metal ever have broke. It is the peculiar metal of Krupp which is sought to be ignored, but the plot will not succeed in the face of undoubted facts, well known and disseminated throughout the world.

Yours truly,

THOMAS PROSSER & SON.

28 PLATT STREET, NEW YORK, May 12, 1865.

## MISSOURI.

The following are the principal provisions of the new Constitution of the State of Missouri, which is to be voted upon on the 6th of June:

1. The constitution, in its first sentence, recognizes our dependence as a people upon Almighty God, the Sovereign Ruler of nations for our State Government, our liberties, and our connection with the American Union.

2. Declares Missouri a Free State forever.

3. Establishes the equality of all men before the war.

4. Prohibits legislation interfering with the personal rights of men on account of their color.

5. Asserts that all government, of right, originated from the people, is founded upon their will only, and is instituted solely for the good of the whole.

6. Affirms that the people of Missouri are a part of the American nation.

7. Declares that Missouri shall ever remain a member of the American Union.

8. Asserts the paramount allegiance of every citizen of Missouri to the Constitution and Government of the United States.

9. Excludes from the ballot-box and from office, traitors, rebels, rebel sympathisers, guerrilla marauders, bushwhackers, and their aidess and abettors.

10. In like manner, excludes Knights of the Golden Circle, Sons of Liberty, and O. A. K.'s.

11. In like manner, excludes those who fled the State to escape the draft.

12. In like manner, excludes those who enrolled themselves as disloyal, or as Southern sympathisers, to avoid militia duty.

13. Provides for an efficient registration of voters, thereby securing the exclusion of illegal votes.

14. Removes the rule requiring treason to be proved by at least two witnesses, and leaves it to be proved as any other crime.

15. Invites immigration from Europe, by extending the elective franchise to those persons of foreign birth, who have, for more than one year before an election, declared their intention, according to law, to become citizens of the United States

16. Forbids private, local and special legislation, which for thirty years has cursed this State, and brings the State under a uniform system of general law.

17. Prohibits lotteries.

18. Forbids the Legislature making compensation for emancipated slaves.

19. Forbids the Legislature removing the county seat of any county, unless, at a general election, two-thirds of the voters of the county vote for it.

20. Shortens the term of office of the Governor and other State officers at the seat of Government, (after the present term,) to two years

21. Establishes intermediate appellate courts between the Circuit Courts and the Supreme Court, without increased expense to the State.

22. Stops the creation of corporations by special acts, with enormous and dangereus powers, and require all corporations to be formed under general laws.

23. Prohibits the creation, renewal, or extension of the charter of any bank of issue.

24. Protects the interests of the people by imposing upon stockholders individual liability for the debts of corporations; and so insures a more honest and faithful management of those institutions.

25. Secures an efficient system of common schools for the free education of the children of the State.

26. Restores to the rank and file of the militia the privilege of choosing their own company and regimental officers.

27. Removes the injustice to the masses of the people, of enormous exemptions of property from taxation

28. Forbids the loan of the credit of the State to any company or corporation.

29. Prohibits the Legislature authorizing any county, city or town to become a stockholder in, or to loan its credit to any company or corporation, unless with the assent of two-thirds of the qualified voters.

30. Forbids the release of State's lien upon any railroad.

31. Gives increased facilities for its own amendment, and allows the people a direct vote upon every amendment proposed.

32. Provides for calling a convention to revise and amend the constitution, whenever the people, being authorized by law to vote upon the question, shall vote in favor of it, *and not otherwise.*

PITTSBURG, FORT WAYNE AND CHICAGO RAILWAY COMPANY, OFFICE OF THE PRESIDENT.—J. F. D. LANIER, ESQ., *Chairman of the Committee named by Stock and Bondholders for sale of new stock*—DEAR SIR:—The Board of Directors of the Pittsburg, Fort Wayne and Chicago Railway Company has decided upon the class of improvements, and the extent of expenditures for construction and equipment to be made between this date and the next annual meeting of stock and bondholders. The whole amount thus to be expended, including payments on work done since January 1, 1865, will in no event exceed $1,000 000.

All of the stock necessary to be sold, in aid of earnings of the road, to meet liabilities incurred and to be incurred, has already been disposed of, and no further issue of new stock will be made for any purpose, until after an account has been rendered of the operations of the year to the stock and bondholders, at their annual meeting in March, 1866.

It is now quite certain that the traffic of the road will yield, after paying operating expenses, interest, sinking fund and dividends, a large sum to be devoted to paying for construction and additional equipment.

Truly yours,

G. W. CASS, President.

OUR COMMERCIAL RELATIONS WITH THE BRITISH PROVINCES.—At a meeting of the Detroit Board of trade, held in March last, resolutions were adopted requesting the President to address letters to the several Boards of Trade of the loyal States and the British Provinces, asking them to send delegates to a general Commercial Convention, to be held July next, at Detroit. The subjects suggested for consideration, at the proposed Convention, were:—

"Commerce, finances, communications of transit from the West to seaboard, reciprocal trade between the United States and the Britisb Provinces, and such other business as may come before the Convention, not of a purely local or political character."

The invitation has been accepted by upwards of thirty Boards of Commerce, including those of New York, Boston and Philadelphia, and the second Tuesday of July has been agreed upon as the time for meeting. The British Provinces are expected to be fully and ably represented on the occasion. We are glad to witness a movement that will afford an opportunity for remedying the un-

wise course of Congress in voting the repeal of the Reciprocity Treaty. How far this Convention may be intended to correct that blunder, we are not informed; but this much is certain, that it indicates a disposition to continue a reciprocal commerce with our Provincial neighbors. If measures can he suggested, mutuatly satisfactory to the Canadians and ourselves, for a broader commerce and a more complete reciprocity of exchanges than exist uuder the present treaty, all the better.

No friend of commerce would object to the substitution of the present treaty by one still more advantageous. We hope, however, that our boards of trade have not invited their neighbors across the border merely to reiterate to them all the nonsense about the one-sided advantages of the present treaty that has been circulated in pamphlets, reiterated by the press and echoed in Congress. The only fault in the existing treaty is that, on both sides, it excludes too many articles from free interchange. The true interest of both countries lies in admitting all the products of each other entirely free of duties; but unfortunately both governments have based their revenue largely upon customs duties, which on both sides give gives rise to difficulties in making the reciprocity equal. We trust our boards of trade will he represented by men who understand that the advantages to the United States are not confined to our exports to the Provinces. That is one of the exploded errors of a false economy. It is as important to us that the provinces should be open to sell us anything it is to our interest to purchase as it is that they should be free to buy anything we can offer them cheaper than others. If there he anything Canada can sell to us cheaper than we can produce the same commodities ourselves, let nothing limit our freedom to buy it; for hy such purchase we effect a saving of hoth labor and money and economise wealth. The same view too should control the representatives of the Provinces.

Really, the great point for both parties to aim at, is to secure a market in which they can purchase cheaper than at home. That being secured, there need be no fear about the exports; for our economy in huying in the cheapest market will enable us all the hetter to compete as seilers. We buy but to sell again; and the only way hy which we can be enabled to sell commodities cheap, is to procure them cheap. There are certain things which Canada can produce cheaper than ourselves, aud other things which the United States can produce cheaper than Canada; and the main purpose of a treaty of commerce between the two countries should he to admit of the unrestricted interchange of such commodities. As, however, it is impossible to say, definitely, what such commodities are, and as there are constant changes in the relative prices of all products, as betwcen the two countries, it becomes necessary, in order to ensue the fullest possible advantage, that all products should be admitted to free interchange. Nothing is more certain that neither party will either buy from or sell to the other, except for an advantage; so that only good could result from unrestricted intercourse. Those are the views that will prevail in the coming Convention, if it be composed of men who comprebend the simplest rudiments of political economy.

☞ A railroad convention was held at Suspension bridge on Friday last, but no business is reported as having been transacted.

## MONETARY AND COMMERCIAL.

The leading feature in the money market tbe past week has been the heavy drafts made by the government on the depositaries in favor of paymasters, to enable them to pay off the returning veterans, and although the money has not been actually taken from the banks, yet the transferring from the credit of the government to other accounts makes them feel that they are liable to be called upon at any moment for large sums. The market is thus rendered close for currency, and a little feeling of stringency is experienced. This, however, will not interfere with regular business, as the wants of trade are usually extremely limited at this season of the year, and long before any legitimately active demand for money can arise, this will all find its way back into the vaults of the banks in a regular way. Eastern exchange, from the above named cause, has been pressed heavily on the market from the country, rendering it flat, and temporarily unsettling quotations, which are:

| | Buying. | Selling. |
|---|---|---|
| N. Y. Exchange.... | 1-10 dis@par. | 1-10 prem. |
| Philadelphia ..... | 1-10 dis@par. | 1-10 prem. |
| Boston ..... | 1-10 dis@par. | 1-10 prem. |
| Baltimore..... | 1 10 dis. | par. |
| Gold..... | 35c prem. | 37c prem. |
| Silver..... | 23@25c prem. | 25@28c " |
| Vouchers, city..... | 2@3c dis. | |
| Vouchers, country. | 5@15c dis. | |
| Certificates..... | ½c dis. | par. |

Tbe *Cincinnati Commercial* rewarks "that the Commercial Bank has received its papers, which transfer its organization to the National system, under the style of the Commercial National Bank. This is the oldest institution in the city in its traditions, having been an offspring of the "Commercial Bank of the United States." It was organized under the free banking law of Ohio, in 1845, with a capital of $50,000, and probably did the largest amount of business, in proportion to its capital, of any bank in the country. Its average of deposits for the past year was $1,250,000. Under the National system, its capital will be $500,000, which was almost entirely absorbed by the old stockholders.

With this change, the venerable President, Judge James Hall, ceases his connection, of over twenty years of most faithful service, witb this bank. He voluntarily retircs now, because of enfeebled health, and will bear to private life the honorable regards of all who have had business relations with him in his responsible trusts. His successor in the Presidency will be Mr. Charles B. Foote, the present cashier, and Mr. Hugh Colville, who has been a teller in tbe bank for ten years, will be cashier.

The bank has always been marked for its conservatism, and will, doubtless, in its new position, sustain its established reputation. The accounts will be transferred to the new bank on the 1st of June."

Espy, Heidelbach & Co., opened on Wednesday, their new office for business, No. 53 West Third Street. Their courteous manners and gentlemanly business tact have thus far won them many friends. May the star of their progress never be dimmed by overshadowing losses, and may they steer clear of the breakers of "outside operations," on which so many of their predecessors have foundered.

Dull is the ruling feature of the general markets, which must to a measure be the case until we arrive at a settling down point as to prices, and a more permanent standard value of gold. If the incoming crops should be large, and afford a large surplus for exportation we will arrive at the desideratum before long.

Much talk is being made about the "*Herald*" plan of paying off the National debt by voluntary subscriptions, this originated not with the "*Herald*," but was first proposed by a merchant to the New York Chamber of Commerce, some two or three month ago. It is very desirable and perfectly practicable, if the "*Herald*" will only make it popular.


## The Old And Reliable Route.

**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAIL ROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers wtll please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.
J. J. HOUSTON, General Freight Agent.
myll Pittsburg. Pa.

MONDAY MORNING, MAY 8,
THE
## Atlantic & Great Western Railway

WILL COMMENCE RUNNING ONE THROUGH TRAIN between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at 8:00 A. M.; arrive 8:40 P. M.

The engines, cars and other eqipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my_1

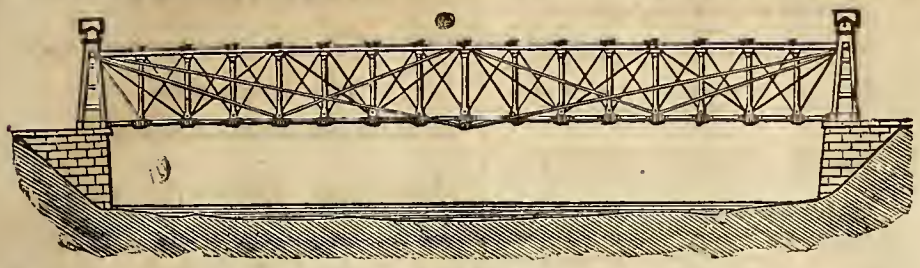
## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

Mar. 5, '53. 1y. Letter Box, 1302. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27 1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or not of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive En-

419 y t

---

## KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA.

---

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

## FINDINGS

—AND—

## MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

Manner, at [illegible] horteste, and on th

Most Reas Terms.

---

Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

MACHINE SHOP

SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

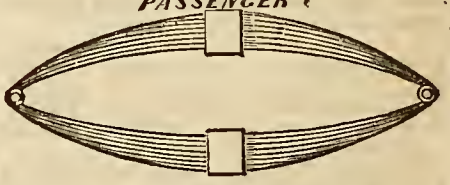
RAILWAY SPRINGS.

FREIGHT

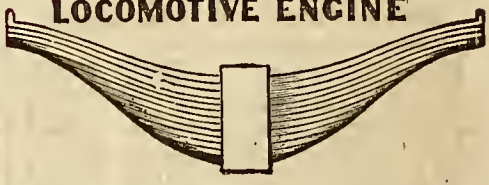




PASSENGER



LOCOMOTIVE ENGINE



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS a Superior Quality of

ELLIPTIC AND SEMI-ELLIPTIC

**SPRINGS,**

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

PHILIP S JUSTICE,

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

No. 47 West Front St., CINCINNATI, O.

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

## STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

**SPEED, SECURITY AND COMFORT.**

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express..... | 6 00 A. M. | 7 30 P. M. |
| Mail and Express..... | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation..... | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation..... | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express..... | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail..... | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo..... | 7 00 A. M. | 9 45 P. M |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation..... | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville..... | 5 00 P. M. | 10 20 A. M. |
| Cin & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation..... | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Buses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail..... | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation..... | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express..... | 8:00 P M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 89 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
General Ticke Agent.

W D. GRISWOLD neral Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis. at which place anites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

ARCHED AND FLAT.



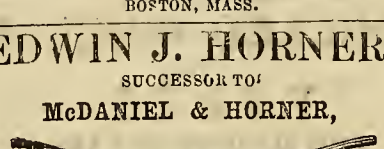
CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2 MOSELEY & CO.
BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

THE SCHENECTADY

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continne to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

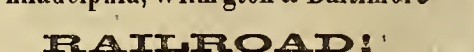
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11.30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East a Wes

WM. TEARNS SUPT

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON, } Editors

CINCINNATI:

THURSDAY, JUNE 8, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$8 Per Annum, in Advance.

ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 8:15 A. M |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| *Atlantic & Great Western—* | | |
| | 8:00 A. M. | 8:40 P M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:45 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond, Chicago and Indianapolis | 7:00 A. M. | 9:45 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 10:20 A. M. |
| Richmond and Chicago | 7:00 P. M. | 12:35 P. M. |
| Hamilton Accommodation | 11:00 P. M. | 6:45 A. M. |
| do do | 7:00 A. M. | 8:05 A. M. |
| Dayton Accommodation | 2:20 P. M. | 9:45 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Chicago and St. Louis Express | 7:00 A. M. | 12:00 M. |
| Springfield and St. Joe Express | 1:00 P. M. | 5:00 P. M. |
| St. Louis and Chicago Express | 4:00 P. M. | 2:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 4:50 P. M. | 8:35 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:40 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 6:50 A. M. | 1:00 P M. |
| Seymour Accommodation | 3:45 P. M. | 5:00 A. M. |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 7:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 8.00 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:55 A. M. |
| Evening Express | 1:35 P. M. | 6:00 P. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## CINCINNATI AND HER WANTS.

It is a universal complaint of all strangers that visit our city that we need a supply of better water than that which is now sent through the mains to meet our daily wants. Although those who are accustomed to swallowing a stated amount daily of the thickened fluid of the Ohio may not suffer inconvenience from its use, yet such is by no means the case with those who visit us either for pleasure or business. We not only need better water if it can be had, but more of it. The various plans and projects for accomplishing both, have been ably discussed and set forth by parties interested and disinterested, yet no definite action has ever been taken to bring about the desired result, and probably will not until it is too late to prevent some serious calamity, or until the cost of doing it will be three-fold what it would be at the present time.

We need a system of providing convenient, accessible and cheap, yet good dwellings of five, six or eight rooms, ranging from ten to sixteen dollars per month rental, for mechanics, clerks and others, in the suburbs of the city, and yet not so far off but they could be reached in twenty-five or thirty minutes from almost any portion of the city, by means of street railroads operated with dummy engines. A few capitalists and land owners could thus not only confer a benefit on others, but they could make it a source of profit to themselves. Facilities could thus be given to men of limited means, but good character, by making a payment of two or three hundred dollars down, and paying a high rate of rental to secure, in the course of a very few years, permanent and comfortable homes for their families, which they, otherwise, would never be able to accomplish. It would stimulate economy and enterprise, and would do much towards drawing their attention from evil habits and dissipation, and would make many good citizens, when otherwise their all might be lost. There is no difficulty in drawing the plans and details for the Government of a company of this kind, and demonstrating its practicability and showing its profitable workings, both to the capitalist and the working man.

We need better harbor improvements, which can be made in the Mill Creek bottom; where steamboats could load and unload directly from the concentrated tracks of railroads, and that would afford ample room for national and private ship yards and foundries, and where perfect immunity from the evils of floating ice could be obtained for boats not in active service, or engaged in their regular trade.

Cincinnati needs a direct railroad connection with the Southern system of railroads, either through the Kentucky Central, by the way of Danville and Knoxville, which would meet the wants of commerce; or a road that would branch from the Central at Falmouth, or what might, perhaps, be better for Kentucky, as well as add largely to the trade of Cincinnati, running direct from Newport through the counties of Campbell, Pendleton, Bracken, Nicholas, Fleming, Morgan, Magoffin and Floyd, crossing the Big Sandy and Tug Fork, to meet the Covington and Ohio railroad coming west from Virginia, which would run through the best iron, salt, coal and petroleum lands on the continent, and make them tributary to the wealth, commerce and manufactures of Cincinnati. There are none who have not felt the want of a better supply of fuel, at some time or other, in their experience of the last ten or twenty years in Cincinnati. Coal famines have occured on several occasions; yet we are surrounded with coal on all sides, we have helped to construct coal roads, but are starved out notwithstanding. The importance of a more regular and cheap supply of fuel can not be overestimated not only to the manufactures, but also to the commercial portion of our community. The supply of other minerals for our manufactories is not of less importance; let coal and iron be put down at our doors as cheap as they can be had at Pittsburg, and who can tell the effect it would have on the manufacturing interests and consequent growth of the city. A branch might also be constructed from this road, would passing through the Cumberland Gap, and meet the wants that would be otherwise supplied by the Danville connection.

We also need a better railroad connection with the great lumber and mineral districts of Michigan and Lake Superior, which could be best formed by consolidating the various interests, now mostly dormant and apparently worthless, yet really valuable by the way of the Tunnel route to Hamilton, the Eaton and Hamilton, and Eaton and Richmond, the Richmond and Fort Wayne, and the Indiana and Grand Rapids railroads, making it all into one route and under one management from Cincinnati to Mackinaw. This would furnish us with building material at as low rate as they are sold at in other great cities, and we would not be constrained to pay as we do now, a tax of from one million to a million and a half of dollars annually, for the same amount of lumber than is paid by citizens of Chicago. Building would thus be materially cheapened, the cost of living lessened, and labor could be either better remunerated, or the cost of manufacturing so far reduced as to enable us to more successfully compete in the markets of the country for their commercial favors.

MAHONING RAILROAD.—The Board of Auditors have just finished the appraisal of the property of the Mahoning Railroad Company. For the year 1864 the appraisal presented a total of $1,675,927. This sum multiplied by five and increased by the addition of $58,000, gives an aggregate of $8,434,135, which is the present appraisal. $50,000 were added for local improvements in the vicinity of Cleveland, and $8,000 for the same in Portage county.—*Cleveland Herald.*

## ATLANTIC & GREAT WESTERN RAILWAY.

QUICKEST TIME ON RECORD.

Ten car loads of freight from New-York to Ciucinnati in *four* days.—*Cin. Gazette.*

We call the attention of merchants and shippers to the above fact with two objects, first to show the great progress of the age in the transit of both goods and persons, and second to not only do that, but to give the due mead of praise to those who have taken the lead in bringing it to such perfection. Well is it remembered by nearly every merchant in our city, when if he could get his goods through from New York in one month he was perfectly satisfied, and he regarded it as being *on time.* The memory of very few will have to be refreshed as to the innumerable delays and perplexing detentions of their freight by the choaking up of depots, where the last to arrive was the first to be taken out, which perhaps was rendered necessary or unavoidable where goods had to be rehandled in passing from one road to another. This is now, however, all obviated as the cars of the Atlantic & Great Western Railway pass over the entire line from New-York to Cincinnati. D. C. HENDERSON, the General Through Freight Agent, contracts under penalty by the "ATLANTIC TIME LINE" to carry goods from the one city to the other, either way, in *seven* days. We are fully satisfied that Mr. H. will not expend much money on penaltias for non-fulfillment of contracts; certainly not so long as he gets the goods through in but little over one half the contract time.

On Saturday, May 27th, we had some machinery carted over from New-York to the Depot of the Atlantic & Great Western Railway, which left the Depot on Sunday evening at five o'clock, being the first train out after the receipt of the goods, which arrived at Cincinnati on Thursday afternoon, (June 1st) and early Friday morning we received the proper notice that the goods were ready to be delivered. At the same time we will remark that one small box, not being quite ready to go with the rest, was sent by *Express*, on Monday, the 29th, and has not to-day (Monday June 5th) been yet received. This is certainly a new feature in the history of the freight business. *Goods through from New-York to Cincinnati, by freight line, in four days*, is something that the early settlers never dreamed of.

The gentlemanly agents of the "Atlantic Time Line" Mr. H. P. CLOUGH, office No. 80 West Fourth Street, and A. C. ROSE, office No. 233 Broadway, New-York, will ever be found reads to render such assistance as Merchants and Shippers need.

☞ D. W. CALDWELL has been appointed Superintendent of the Central Ohio Railroad. Communications with reference to his department should be addressed to him at Zanesville.

## ON THE MECHANICAL CONDITIONS OF RAILWAY WORKING TO PREVENT DESTRUCTIVE WEAR AND RISK.

BY W. BRIDGES ADAMS.

This is a subject not of mere local or of class interest. In days gone by, when a man was by the mass of Cockneys esteemed a traveler if he had been to Gravesend and back, it would have interested but a very few to discourse on the means of transit, but in the present day, all men, women and children have become locomotists, getting back to a state of nature, like the birds and wild animals, and no longer confined to the spot on which they are born and bred. And a very good thing it is for themselves and general humanity, for they thereby become educated, not in the sense of book learning, but in the sense of knowledge of men and things, expanding their thinking faculties with the more healthy growth of their bodies. We increase thereby the number of men and women, instead of mere human animals, and we increase also national power, which is not to be measured by animal units, but by the mass of intelligence, health, and physical strength—in short vitality. It is better to soar like birds than to burrow like rats; and though we can not soar above the earth, with guiding power like birds, we contrive to skim along the surface though not quite so fast, and do not yet see our ultimate limit to speed accompanied by safety. We are fast becoming a nation of mechanicians, and each man's strength is as the strength of ten, as fast as he acquires a sound body for a sound mind to dwell in. The subject is possibly a dry one in its details, but out of these dry facts must come the growth of progress, and this must be the writer's apology for dwelling on them, though in as succinct a mode as language will permit. In criticising any subject it is but natural that the critic should devise plans for amending that which he deems wrong, and in so doing the writer would deprecate any appearance of egotism in dealing with his own plans.

In vehicular transport the contact between the vehicle and the road it moves on may be of three kinds, sliding, sledging, or rolling. The sliding movement may be converted into rolling by the application of water, oil, or unguents, the particles of which form rolling bodies between the vehicle and the road, as with the ship on water, or with the wine sledges used in Madeira, where the driver sluices the road beneath the sledge runners, or with the winter sledges of cold climates, where frozen surfaces supply rolling particles. If actual contact between the moving vehicle and the road take place without the intervention of rollers or lubricants, destruction must ensue by abrasion.

Where no means exist of supplying lubricants to the road surface, the next process to ease the sledge is to place rollers under it. If the rollers be true cylinders, and are not fixed to the sledge, and the movement be in a straight line, there will be absolute movement without friction. If the rollers be fixed to the sledge, by axles passing through them and bearing the load, the friction will be transferred to the surface of the axle from the surface of the road, and will be greatly reduced if the oil or unguent forms an efficient lubricant. If the roller bears on the road through its length, and be a true cylinder, it will move forward in a straight line. If it be of a conical form it will move in a curved line corresponding to a cone. But if two coned rollers be fixed to the sledge with their axles parallel, the movement will be partly sliding and partly rolling, with great friction in a straight line. If the two coned rollers be not parallel, but are arranged with their axles in converging lines corresponding to the cones, the machine will move in a circle, the centre of which will be the point where the converging lines intersect each other.

The ancient Greek and Roman cars were mounted on rollers, *i. e.*, a pair of wheels connected by a fixed axle running between tholepins, such as up to the present day we see in the wine-cart of Portugal and parts of Spain, which are unfitted to turn corners, and make so fearful a squeaking when running out of a straight line as to give rise to the jest that they are so ordered to give warning to the custom-house officer in case of smuggling. Double-rolling cars also existed, with fixed parallel axles, and this faulty mechanism was probably one cause why the old Roman roads were made in straight lines, as it was easier for such cars to run up hill than to follow curves. Even supposing the case of four-wheeled cars with two wheels running independently on their axles, these cars could still only run in straight lines as long as their axles were rigidly parallel; and in England it was only during the reign of Queen Elizabeth that what were called "turning carriages" first existed, *i. e.*, with a mechanish that permitted the axles to depart from their fixed parallelism to pass round curves.

When railways, as distinguished from tramways, were first commenced, the faulty mechanism of the early classic cars was resorted to as a cheap structure—cheap in first cost. Wheels proper were ignored—*i. e*, wheels running independently on their axles—and rollers *i. e*, two wheels fixed to a shaft or axle which revolved with them in thole-pins, or what are now called horn-plates. And, whether two axles or three or more were used, they were always rigidly parallel. And this is the common practice in England to this day.

What are called tramways are formed of flat plates of iron, with rising edges to keep the wheels in track. Ordinary wheels, revolving independently on their axles, were used on them. Their mechanical disadvantage was that dust and dirt accumulated on the horizontal plates, and the wheels rubbed hard against the rising edges as against rising kerbstone, and caused much friction. Opinions are divided as to the origin of the term tramway, whether derived from an originator named Outram, or from the word "trammel," to curb or guide. The term "platelayer," on railways, is evidently derived from the original tramplates. On railways proper, what is called the edge rail is used, in which the increased depth gives greatly incrersed strength to support the load, and at the same time, dust and dirt have but little chance of remaining on the rails. But to keep the wheels on, the rising ridge or kerb of the rramway is transferred to the wheel, in the form of a flange. It is clear that vehicles with fixed wheels and parallel axles are only adapted to move in straight lines. If the axles were converging, the vehicles would only move in curved lines. But there is another common condition, a result of faulty workmanship—parallel axles not at right angles to the line of traction; in this case the machine becomes a sledge under all conditions, with the wheel flanges constantly grinding against the rails.

With a view to compensate, on curved lines of rails, for the different lengths of pathway on the two rails, it has been a practice to make the wheel peripheries conical instead of cylindrical; *i. e.*, each pair of wheels fixed on

the axle being practically a garden roller, with the central portion removed, and made at each end a frustrum of a cone, with the smallest diameters outside. Were the roller solid, *i. e.*, were the coned lines prolonged till they met in the centre, the roller, if balanced, might run in a straight line, or it might run in a curved line, to right or left, if bearing on either cone, the curve being regulated by the angle of the cone. This would be the case with a single roller. But it is a fallacy to suppose that two or more rollers fixed in a frame with the axles permanently parallel, would follow the same conditions, even though sufficient end-play were allowed between the flanges and the rails to make the differing diameters across the breadth of the tires available to compensate for the differing lengths of the rails. The movement in a straight line might be free rolling at low speed, provided the cones had sufficient lateral movement or end-play, but on curves it would only be sliding or sledging. But if the frames were so arranged that the axles were permanently out of parallel by reason of careless workmanship, the machine would be a constant sledge both on straight and curved lines. So if the axles were perfectly parallel, with the wheels in the same plane, but were not placed at a right angle with the line of traction, the result would be constant sliding friction.

If any of these four conditions—whether a truly constructed frame, with parallel axles, or badly constructed with axles out of parallel, or badly constructed with parallel axles and wheels out of plane, or not at a right angle with the traction rod, though the first may roll at intervals under a favorable condition, the three latter must always slide, and the resistance to traction will be in proportion to the roughness of the rails and the load on them. With a light vehicle, little loaded, smooth wheels and polished tires and rails, and especially if they were lubricated on the surface, the resistance might be very small. Nay, a sledge might even be better than a wheeled vehicle, if only the condition of a lubricant could be retained. But a lubricant on the rail is inadmissible, first, because it would cause dirt to adhere to the rail, and secondly, it would defeat the condition of adhesion essential to the traction by the locomotive engine. The engine needs the greatest possible amount of adhesion, corresponding to the steam power. The vehicles should be so constructed as to minimize the amount of resistance. But as at present constructed, the vehicles on a railway are in principle a reproduction of the old Roman cars on two rollers, with such variation as a better or worse condition of workmanship or lubricant may induce, and the change from a common road to a railroad.

Axle friction, under the best condition, is commonly estimated at about four pounds per ton of load, but this is usually doubled by a condition, that under the best treatment ought scarcely to exist, viz: rolling friction" *i. e.*, the friction of the tires on the rail, and thus at a moderate speed on the level, eight pounds per ton is estimated as train resistance. But this, it is well known, is very far short of the real resistance in practice, which by quick curves and bad structure may be quadrupled and quintupled, varying with the speed of movement.

A river running with a slow movement may pass along a winding channel without disturbing its banks; but the same river, with its speed increased by a sudden influx of water, seeks to make a straight course and cuts away its banks, or *rives* them, in a mode corresponding to its etymology. Even so, a railway train at high speed becomes a *river* of the rails, at an increased cost of coke converted into steam; and, like the river water, it produces debris, not in the form of gravel, but of black iron powder, as any one may verify by rubbing his finger along the rails after the passage of a train. This is fractional destruction, increased or diminished, in proportion to the load on each wheel.

But there is yet another element of destruction—percussion or blows which take place between wheel and rail, friction or percussion being the only sources of mechanical destruction on railways—the other being chemical. It is quite clear that were a train to stand still on a railway, and never move, it might rust and rot, but it would not wear out, and though the proverb is a sound one "better rub than rust," it is still better to do neither. The movement of the train begins the great destruction, and it is want of compensation for irregularities—a condition never disregarded by nature—that causes the destruction. The wheels, when running on equal paths, induce great torsion of the axles by friction on the rails. At bad joints or uneven surfaces the wheels jump from the rails, and they then recover their normal position, by the axle as it were unwinding itself like a discharged spring, and striking a violent blow on the rail. Sometimes the wheels, with the axles in a state of tortion, drag along for a considerable distance, heavily loaded, and this is a fruitful source of axle breakage as well as of rail destruction. Again the flanges strike against the rails from side to side, and a constant succession of blows and vibrations is induced throughout the whole of the train. And with long vehicles, on sharp curves, there is a constant tendency to grind the flanges and burst out the rails. The rapid wear of wheel tires and rails yields ample evidence of this, and the probability is that at high speed the movement is as much sliding as rolling—side as well as forward sliding. But for the partially polished surfaces of both wheels and tires facilitating slip, at the loss of adhesion on the driving wheels, it is probable that the destruction would be much more rapid.

Are these proofs needed of all this? Time was that rails of 60 lbs. per yard, and Staffordshire tires too tough in texture to break, were capable of considerable duration. They have gone by, and rails, after various experiments in making them harder in iron, have grown to 84 and 90 lbs. per yard, and now with Bessemer steel for metal; and tires, after running through the phases of Park-gate, Low Moor and Leeds, and various plans for steeling their surfaces, have now culminated in Krupp's solid steel.

It is many years since the writer became aware of the importance of elastic action, even on wood wheels used on highways and paved streets, to induce durability, and facilitate traction, when high speeds were needed. In the structure of the ordinary wood wheel the strength resides in the tyre, which keeps the weak frame together. Originally, wheels were made vertical, *i. e.*, with the spokes all in a plane, and the width of base was determined by the ruts or hollows which pervaded all roads, giving a kind of fixed gauge, much as rails do now. The bodies were placed between the upper part of the wheels, and when it was needed to widen the bodies, the wheels were made in the form of a cone, or what is called "dished," the axle-arms being pitched downwards to keep the lower spokes vertical, with an idea of strength, while the upper spokes inclined outwards with a considerable angle. The fellies and tire were made conical, to preserve a flat tread on the ground. It is evident that as these wheels revolved, they were constantly grinding the road, the outer side of broad wheels being considerably less in diameter than the inner, while the vertical spokes were continually driving into the nave and loosening the framing.

After trying some experiments with wheels in which hoops of elastic steel were used to connect the periphery with the nave, instead of spokes, the writer had some made with the section of the wood spokes reversed. The ordinary mode is to make the spokes deepest from back to front, but in the improved samples were made broad in the plane of the wheel, and thin from front to back. As this was a bad form to fasten in the ordinary nave, it was dispensed with, and a pair of disk wheels were substituted, between which the spokes were mitred together and bolted. One felly was used to each spoke, instead of the ordinary practice of one felly to two spokes, and when cylindrical tires—not conical—were shrunk on, the spokes curved from back to front, and the wheel, instead of being a rigid cone, or dish, became an elastic dome each pair of opposite spokes radiating from the centre, representing the form of an archer's bow. The fastening of the tires was through the joints of the fellies. When applied to a straight axle, with the arms not pitched downwards, the load was carried, not on a rigid vertical, but on a bent inclined spoke, and the result was that the load was not only carried more easily, but the wheels were, for their scantling, the most durable ever constructed.

In the early railway wheels the principle obtained of neglecting the structure of the frame, and making it depend for strength on the shrinking of the tire, just as wood wheels were made. One result of this was the flattening of the tire between the spokes, and a tire of unequal thickness, when turned in the lathe to make the external periphery a true circle, and a consequent rapid destruction in wear. This applied to the wheels with the wrought iron spokes. The truest formed wheels were those of cast iron with a wrought tire. They might break if of careless moulding, but they would not otherwise alter their form, and the tires could be all of equal thickness. But upon rigid cast iron wheels the tires became exposed to very rapid destruction as the loads increased.

The writer had early turned his attention to the importance of wood wheels for railways, any as far back as the year 1838 caused some to be constructed with two rows of follies, break-joint between the tire, and a cast centre. They worked well, and the writer has been informed that they still exist. The difference between these wheels and the modern wood wheels is that they had the elastic side grain on the tread, whereas the modern wheels have end grain. The reason for substituting the latter less perfect method probably was the difficulty of ensuring dry timber on a large scale, and wood shrinks scarcely at all endwise, so that the shrinkage involves less evil.

Wood wheels on railways are, as now make, solid disks, and therefore the frame preserves its circular form without being excessively rigid. Iron wheels have also been made in the disk form, both in cast and wrought iron; but then extreme rigidity rendered the destruction of the tires a very rapid progress;—the tire was between two anvils—the frame of the wheel, and the rail supported on chairs of castiron.

To prevent this destruction the writer early devised a wheel in which the spokes were all springs, but that did not answer, because the bending of the spokes prevented the wheel from running true. The next plan was to apply a hoop of elastic steel between the tire and the peripbery of the wheel, with a hollow below tbe steel. The wheel was retained in the tire by a rising rib in front, solid with the tire, and by a lower rib behind, sprung into a groove of the tire. Modeis are on the table and a section on the wall.

The plan was satisfactory in theory, but how to put it in practice was another matter. A railway was needed, and railways are not to be found in a private field or park; they are the highroads of the public, and in charge of officers whose first care is to take no risk by an unknown plan; for if an accident happens through a known plan in common use, however faulty in its mechaincal philosophy, a jury will acquit the manager of all blame. But if the accident happens with a novel plan, however theoretieally right it may be, the jury will probably condemn it as new-fangled, and saddle the manager or engineer with tbe blame; and thus there is a natural indisposition in engineers to step beyond their tether into the unknown, and they can hardly be blamed for their caution.

So the writer went forth on his propaganda to expound an unknown quantity, but few would even listen to him, ond none would believe; but strong in faith he perserved, and at length found an engineer with a logieal mind, in the locomotive superintendent of the North London Railway, Mr. William Adams. The writer demonstrated his principle, and Mr. Adams was nnable to disprove it logically whereon the writer remarked: "If you can not demonstrate it to he wrong, and I demonstrate it to be right, and that the result if successful must be very advantageous, you are bound to try it." He agreed to this, and said "I will try it, though doubting greatly. What wheels will you apply to it?" "Those most destructive to tires."

So a set of wrought iron disk wheels were selected, and Staffordshire tires were applied to them on hoop springs, and they were placed under a heavy carriage. At the same time a set of ordinary spoke wbeels, with a set of Low Moor tires fixed in the rigid mode, were applied to a similar carriage. Tbe Low Moor tires required turning up to restore their surface after running less than 50,000 miles The Staffordshire tires on springs ran 160,000 miles without turning up, and with no alteration of form, and were then taken off to exhibit, and may still be seen in the same condition.

There is no mystry in this. The Low Moor tires were exposed to severe wear. First, because on curved lines they were necessarily foreed to slide on the rails, both forward and letterially. Secondly, because they were rigidly fixed, and possessed no elastic yielding to elude blows. Thirdly, because on curved lines there was a eonstant torsion of the axles causing incessant jumping. Fourthly, because the tires had no power of lateral movement to suit the varying inequalities of the rails. In short there was no compensation for irregular movement, and the result was a constant grinding of the flanges and treads.

With the spring tires, on the contrary, there is universal compensation. First, there is no tendency to blows, because the elastic cushion preseaves constant contact between tire and rail. Secondly, there is no torsion of the axle or slipping of the tires on the rail because the wheel can, on curved lines, slip in the tire on the smooth surface of the spring without damage, thus equalizing tbe pathway. Thirdly, the tire can rock laterally on the wheel to adjust itself to the bearing on the rail surface, which any one may observe to be constantly varying, sometimes the middle of the rail being most prominent, sometimes the inside edge, and sometimes the outside. No other class of wheel can supply these various compensations.

Important as these wheels are for vehicles which are simply drawn, in order to remove resistance, they are still more important for engines with the load greatly increased, and especially for driving wheels—more especially for engines with four coupled drivers. It is obvious that if two wheels of equal diameters be fixed on the same crank shaft they must grind and drag on curved lines, and the torsion thence ensuing is the main cause of the breakage of crank axles, which it is difficult to make strong enough for their work, the axle being in reality a very long axle, as would be readily apparent were it stretched to a straight line—between eight and nine feet long on the narrow gauge. When four wheels are coupled the diameters very rapidly alter by irregular movement, and the adhesion may actually become disadvantageous, retarding the engine by frictian, like a brake. It is clear therefore that the power of slipping the wheel within tbe tire to compensate for curves and irregularities becomes a question of the greatest importance, both as to facilitating haulage and preventing the wear of tires.

It has been at times assumed that the slip of the tire on a wheel must defeat the purpose of haulage. But when it is remembered that the bearing of the wheel is over half the diameter of downward pressure, and that with a heavily-loaded wheel a slight flattening of the tire takes place, it is abvious enough that slip will only take place by excessive friction on the rail; this is the true theory, but, for the satisfaction of those who only believe in practical results, it may be stated that the experiment has been tried repeatedly, and it has been found that when the tires were so loose on the springs as to he turned round by hand with the wheel lifted, the haulage was in no way affected. On a London line, of sharp curves, where the leading tires of ordinary engines with parallel axles had their flanges constantly ground off in two months' wear, a bogy engine was set to work with a turning centre to radiate the leading axle to the curves. At the same time a similar sized engine, but with parallel axles. was applied with spring tires to the leading wheels. The result was that in both cases the leading flanges were saved from damage, and ran three times the ordinary distance. The yield of the springs had an effect similar to that of the play of the axle to right and left in the bogy, when truely centred, for if not truly centred the flanges wore unequally.

These spring tires were adopted on the engines of the St. Helen's line, by Mr. James Cross, the engineer. That line is an incessant continuation of sharp curves and gradients, some of the latter 1 in 35, and some of the former two chains radius. The spring tires were first applied to a six-wheeled engine, all coupled drivers of 4 ft. diameter. They were all of Staffordshire iron. At the same time another engine of less weight, also on six wheels but of 4 ft. 6 ins. in diameter, and only four coupled, was fitted with tires of Krupp's steel. After running 41,000 miles, Krupp's tires was so deeply worn as to need turning up, while the Staffordshire iron tires ran 65,000 miles, and then only required the flanges to be reduced which had been deeper at the outset, the tread of the tire remaining in good shape. Taking into consideration the difference of diameter, the distance run by the Staffordshire iron was as 72,000 against Krupp's steel 41,000. In practice, Krupp's tires was found to slip on the rails even in dry weather, but the Staffordshire iron was scarcely ever known to slip, though working steeper gradients and sharper curves.

Another set of experiments was tried with two fellow engines, one of them fitted with spring tires, the other with rigid tires, up a gradient of 1 in 80, during a whole day, by the same driver. The result was, that the rigid tires constantly drew up 13 loaded coal wagons, and the spring tires fifteen.

The result of this elastic principle having been so unmistakably advantageous in wheels, the writer began to consider whether the same principle might not be practically applieable to rails also. It is clear that the destruction of rails arises from blows between the wheel tires and the rails, increased in destructive effect in proportion to the load, and therefore it is, that it is now proposed by some railway companies to substitute steel for iron in rails as well as tires.

On the North London Railway, the rails are 82 lbs. per yard, and their average duration on the main line does not exceed four years, if so much, the traffic on each pair of rails being upwards of 120 trains per diem of goods, coal and passengers. The great wear is not owing to wear of attrition, but to crushing, disintegration of the laminæ. The rails are double-headed, and worn out on both tables before they are taken out. The sleepers are three feet apart, and the rails are fixed in cast iron chairs with wooden keys, the joints being fished with long fishes and four bolts.

Iron rails are in their manufacture practically "scrap iron." They are formed of bars of various sections piled together and heated, and then rolled out. In the act of heating, the oxygen of the atmosphere gets access to their inner surfaces, and scale is formed. This scale does not roll out, but rolls in, keeping up a constant separation of fibres like the grain of wood. With a certain intensity of blow on the line, the chairs and sleepers serving as anvils, the fibres are crushed apart, and the utility of the rails is destroyed.

Steel rails are not formed of separate masses welded together, but each of a single ingot rolled out without flaw or imperfect junction. They are homogeneous, which the iron is not, and therefore do not disintegrate with the same amount of blow which disintegrates the iron. But to be safe, the steel rail requires to be not only homogeneous in metal, but in the temper of the metal also, If the steel rail be taken hot out of the rolls and thrown on a cold iron or stone floor, it may become partially chilled—hard and soft—and in this condition it is apt to break, for which reason it is always recommended to keep the steel rails as soft as possible, to prevent risk, in fact to reduce them to the condition of iron. But the better plan would be to use spring steel, and harden and temper it.

There is a notion prevailing that permanent way on cross sleepers is elastic by virtue of its discontinuous bearing. But it is obvious that if there be any yield of the rails between the supports, there is none at the chairs themselves. If the rail be loose in the chair, which it commonly is, and if the sleepers be loose in the concreted ballast, which they are commonly the looseness only serves to give momentum to the blows of the wheels, so that the rail drives into the chair, the chair drives

into the sleeper, and the sleeper drives into the ballast, while the fish-joint bends at the weakest point.

On a portion of the main line of the North London, the rails and chairs being taken up, longitudinal timbers, four inches deep by eleven inches wide, were spiked down to the sleepers. On these longitudinals, midway between the sleepers, were placed cast iron brackets in which the rails were fixed, suspended by the upper table, and not resting on the lower table, as in chairs, the bottom of the rails being 1¼-inch above the longitudinal timber, so as not to touch it. The joints was fastened as usual. The cross sleepers were packed hard and tight on solid ballast. The longitudinal timbers were not packed, the result being that the rails were continually supported on elastic base. With the traffic of the trains the mechanical action was, that no wheel pressed directly on a single sleeper with a hard blow, but that the weight on each wheel was distributed over two or more sleepers, and that through an elastic medium. Practically, after nearly three years wear, none of these rails have been found to disintegrate, but are as perfect when first laid down, except where connected rigidly to the ordinary line, and there the ends of the rails are split; and the elastic action is not merely vertical, but horizontal also, by a slight twist of the longitudinal timbers preventing side blows from the flanges of the wheels.

It was also found that the sleepers remained quite undisturbed in the ballast, owing to the distribution of the weight, and that they really became *sleepers*, instead of dancing up and down. Moreover, the provision for elastic action dispensed with the practice occasionally resorted to of digging up the ballast below the sleepers to soften it, and prevent the extreme regidity. It is getting to be a well known fact that constant traffic and the use of heavier engines and vehicles is gradually solidifying the whole of the railway lines, so that the destruction of the plant, both fixed and rolling, is on the increase. A superintendent of a long line running on hard ground informed the writer that he contemplated re-spacing the whole of his sleepers in order to use the softer intervals. An illustration of this great evil may be found in the fact that in the winter time when all the ground becomes hard with frost, the destruction of wheel tires and rails by breakage, is greatly on the increase.

After the successful result of the first experiment on elastic lines, the superintendent of permanent way, in which the cross-sleepers are six feet apart, or double the ordinary distance, the supports of the rails on the longitudinals being three feet apart. The same result was obtained in preserving the sleepers steady in the ballast, though the elastic yielding was greatly increased, being quite perceptible under the rolling trains.

Ballast in England and elsewhere has become a kind of stereotyped custom on railways, though there are districts, as Egypt,—the Southern states of America—where a driver "guesses he never run on ballast but only on mud roads"—the Pampas of Buenos Ayres, the Llanos of Venezuela, and elsewhese, where no ballast can be had, and so it is dispensed with. But the theory of ballast has hardly been considered. It was originally used on non-porous soils, as a kind of easy drainage for surface water, and in some places tolerably cheap. And it does not yield like clay. But it very soon ceases to be porous under the sleeper, and becomes a kind of conglomerate, or concrete, each sleeper pit holding water like a pond. But inasmuch as it has been practically demonstrated that with a provision for elasticity the sleepers may advantageously be rigid fixtures, there seems to be no reason why the whole surface of a railway should be covered with 18 inches of gravel or broken stone, varying in price from 1s. to 2s. 6d. per cubic yard. The object should be rather to cover it with non-porous material, so as to keep out the surface water, the same principle on which we pave the footways of our streets; and there is no doubt that it would be cheaper in many cases to use stone flags or cast iron for sleepers, rigidly fixed and overlaid with elastic longitudinals, so as to dispense with ballast, even in first cost, say nothing of the saving in maintenance. As regards such lines as are constructed on brick arches, the elastic system would prevent the vibration which so commonly disintegrates them, and, by ramming down the ballast, forces out the porapets; and it would be better to cover the surface with non-porous material, such as paving stones, and get rid of mud and dust altogether. The action of this novel system depends upon the elasticity of the longitudinal timber, but inasmuch as there are circumstances in which timber is inadmissible, such as very hot climates, or climates of great heat and moisture combined or alternating, the writer was led to consider whether it might not be practicable to obtain the elasticity by the agency of metal. This can be done in two methods, substituting a broad T-iron for the longitudinal timber, or by applying springs of tempered steel beneath the seats of the rails, which in that case can not be suspended by the upper table, but must rest below the vertical web, being supported between the bracket sides with provision for the small amount of movement required. The models of cast sleepers are on the table, with elastic steel bases. The cost of them will not exceed ordinary iron way, as great weight of metal is saved.

It is desirable that the rails should be of such depth as not to deflect beneath the wheels, and also that they should not deflect laterally, for which reason the tables should be of ample width. It is also important that the rails should be so joined together as to form non-deflecting bars at the joints, though with provision for expansion and contraction. In examining the ordinary fishes it will be perceived that the original principles of the writer's invention have not been carried into effect. These fishes as ordinarily used, are parallel bars, about eighteen inches in length, and with four bolts to attach them to the rails. As the total depth of the fish is only between two-and-a-half to three inches, it is obvious that a pair of three inch bars can not possibly be equivalent in strength to a rail five inches in depth, and provided with two broad tables, In order to compensate for this defect in some measure, the fishes are made as thick as possible, approaching an inch, making them very rigid. They are wedge-formed between the the rail-tables, but an obtuse angle, not an angle of repose, and they depend wholly on the bolts to keep them in position under the action of the trains, and the slightest movement of the rail loosens them. For this reason the bolts are made are large as possible. The large hole weakens the fishes, and it necessary to drill the holes, as punching distorts a narrow thick bar. Moreover, as the fish is as thick at the ends as at the centre, the result is a blow from the wheel at the fish end, where it is too strong, and a second blow at the joint where it is too weak, and a gradual dent at the fish end into the rail, and another dent at the rail end into the fish; and when these dents begin to form, the process of destruction is certain; rust is formed, rubbed off, and begins again, and the noise and jolt is rendered very perceptible to to the passengers before the cause is detected by the eye, except when a train is passing, when the deflection is very perceptible.

To remedy this evil, the writer has devised a true form of fish. It is tapered from the ends towards the middle, where it is the full depth of the rail on the outside fish, and on the inner the full depth of the rail, less the upper table to make room for the wheel flanges. Angular ribs are rolled on the inside of the fishes, to fit accurately against the rail tables, and the fishes are arched laterally. The metal being thin, except at the ribs, they are easily punched without distortion, and when the bolts are screwed tight, the arches of the fishes flatten and press the ribs against the rail tables firmly. The bolts thus acting on elastic surfaces, the nuts remain tight, and the joint is elastically firm. The models of the elastic way, both in timber and iron, with steel springs, as well as the improved fish-joint, are on the table.

The writer has dwelt upon this subject the more earnestly because on any new plan connected with a railway, a protracted experiment is needed for verification, and this protracted experiment of elastic railway has been made, and can be examined by all who feel an interest in so important a subject.

---

New British Steam Fire Engine.—Mr. Hodges's new steam fire engine, recently manufactured by Messrs. Merryweather & Sons, at their new works in Lambeth, was forwarded to Mr. Hodges, of Lambeth London, this making the third belonging to that gentleman's fire brigade. The new engine is elegant in appearance, and is very similar in construction to those for which these makers gained the first prize at the Great International Contest. Its name is the Ocean Wave. The design of the pump, steam-cylinder, and motion, is very simple, there being no cranks, eccentric, or fly-wheel. A uniform speed of the piston is maintained throughout its stroke, thereby causing a very steady column of water to be always thrown. The engine can be run at either one stroke, or any number of intermediate strokes up to one hundred and fifty per minute, at the will of the engine driver. This engine has two delivery cocks, each with breeches-pieces, so that either two, four, or six jets of water may be thrown upon a building at one time. Steam is raised in the boiler from cold water in about eight minutes, and the pump will discharge at least five hundred gallons of water per minute to a distance of two hundred and twenty feet. This engine is nearly double the power of the celebrated steam fire engine Torrent, made by the same makers as the Ocean Wave and belonging to the same far-famed brigade of Mr. Hodges.

---

La Crosse and Milwaukee Railway.—Gov. Lewis has appointed Stoddard Judd, Esq., as Receiver of the La Crosse and Milwaukee Railway Company, under an act of 1864, providing that if the receiver, manager or superintendent of the road did not pay over twelve per cent. of the gross earnings of the road as a sinking fund for the redemption of the farm mortgages, the Governor was to appoint a Receiver. Of course, the legality of the act will be tested.—*Milwaukee Wis.*

## HON. ISAAC H. STURGEON,

PRESIDENT OF THE NORTH MISSOURI RAILWAY.

Isaac Hughes Sturgeon was born on the 10th day of September, 1821, about eighteen miles from the city of Louisville, in Kentucky. His paternal ancestor was a native of Pennsylvania; he emigrated from Pennsylvania to Kentucky in 1780, while it was a territory and part of Virginia, at the time the Indians were very troublesome, and persons to protect themselves were compelled to live in stations. His great grandfather, John Hume, was of Scotch-Irish descent, and grandfather, Sturgeon of Irish descent. His ancestors were Irish. His maternal ancestor was the eldest daughter of Edward Tyler, Ser.; her ancestry emigrated from England and settled in Virginia, from whence he removed to Pennsylvania, from which State he moved to Louisville, Kentucky, and from thence some fourteen miles in the country Edward Tyler, the father of the mother of Isaac H. Sturgeon, was at this time only twelve years old. The Tyler and Sturgeon farms were about five miles apart.

Eliza Tyler was married to Thomas Sturgeon on the 28th of August, 1816, and they had three boys, Edward Tyler, Isaac Hughes, and Thomas Levi. Edward was named after a brother of his mother, and her father and grandfather. Isaac was named after another brother, Isaac Hughes Tyler, and the great grandfather of his mother on her maternal side, and Thomas was named after his father and grandfather, and the middle name given to distinguish him from other Sturgeons who bore the name of Thomas, being the name of his mother's eldest brother, Levi Tyler.

Shortly after Thomas Sturgeon was married to Eliza Tyler, John Hume, the grandfather of Thomas Sturgeon, gave them three hundred and sixty-five acres of land adjoining where he lived, on which they settled and erected a good hewed log house, and opened a farm on which they lived until their death. Thomas Sturgeon died on the 5th of September, 1822, of bilious fever, on his farm at his own house; Isaac, his second son, lacked five days of being a year old at his father's death, and Thomas was not born for five months and a half after his death. The widowed mother adhered to the home place, and was aided by her father and her husband's parents in having the farm cultivated. She took care of her three little boys, and never married again. She died on the 13th of July, 1833, at her home on her farm, of cholera. Both mother and father were faithful members of the Baptist Church from early life until death. Thus at tender years these children were deprived of the affection of parents. Edward, previous to the death of his mother, had attended school from the house of his uncle, Robert Tyler, about eight miles from Louisville, Ky., and on the death of his mother he went into the wholesale grocery and commission house of Willis Stewart, in the city of Louisville. The brothers of the mother of the boys met and sold off the property that by law should be sold, but certain mementoes of work done by the mother were, at the request of the children, reserved from sale and kept to this day.

After consultation it was agreed between Levi and Robert Tyler, that Robert Tyler should have the care of Isaac and Thomas, and they were transferred from there old home to his house. Here they were treated with parental affection and kindness; but none can fill the place of parents, however kind and good. For four years they walked or rode two miles to school and two miles back each day. Their school-teacher was Robert N. Smith, who now resides near Lexington, in Lafayette County, Missouri. The boys received an ordinary English and Latin education. In the fall of 1837 they left this school, went to Louisville to live, and Isaac went into the wholesale house of Willis Stewart, and Thomas that of James Stewart. The Stewarts were first cousins of their mother. The mother of the Stewarts was Elizabeth Hughes, the sister of Edward Tyler's wife, who was Nancy Hughes. For nearly three years Isaac remained in the store of Willis Stewart, and commanded the confidence and respect of his employers. In 1842 Isaac left this employment to write in the Louisville Chancery Court—a Court of Equity. Charles J. Clarke was the Clerk of the Court, and Isaac H. Sturgeon took meals with his family, and had sleeping-rooms in the law office of Messrs. Guthrie & Tyler. Mr. Clarke took more than ordinary interest in Mr. Sturgeon. Mr. Sturgeon wrote for over two years in the office, when the close confinement beginning to tell on his health, Mr. Clarke recommended him to seek to be made a deputy-marshal of the court, which would give him out door exercise, and might restore him. Mr. Wm. A. Cooke, the then marshal of the court, kindly appointed him his deputy, and he continued to act as such until his death, when John A. Crittenden, a nephew of the Hon. John J. Crittenden, was appointed the marshal of the court, and Mr. Sturgeon was continued as deputy.

In the year 1842 Mr. Sturgeon made a trip to St. Louis with his uncle Robert Tyler, and there was so impressed with its future prospects and greatness, that he resolved to make it his future home as soon as favorable circumstances should offer. This opportunity presented itself in the winter of 1845-'6. He and his brother Thomas, in that winter, purchased a saw mill in St. Louis, and removed there. They operated the saw mill about two years, and sold it out and engaged in real estate operations.

In 1848 Isaac H. Sturgeon was elected an alderman of the City Council of St. Louis, and continued as such until 1852. In 1848 he was appointed by the Governor of the State a Director in the Bank of the State of Missouri, and served until 1852, when he resigned. At the election in August, 1852, he was elected to the State Senate, running several hundred votes ahead of his ticket, and defeating his opponent by over 1,500 votes.

Soon after his election to the State Senate of Missouri, the Governor of the State convened the Legislature in extra session, to dispose of a grant of lands that had been made to the State to aid in building the Hannibal & St. Joseph, and Pacific Railways. He was at this extra session appointed chairman of the Committee on Banks and Corporations, and of Ways and Means. A question arose as to whether the lands for the Pacific road should be applied to build the southwest branch to the west border of the State, or to the main line to Kansas City. Mr. Sturgeon gave such influence as he could command for the southwest, and with other friends carried the lands for this route, which will ultimately secure its construction.

Whilst in the Legislature he was noted for his close attention to the interests of his constituents, and his energy and earnestness in whatever he favored. He was never behindhand with his reports on any business, when the order of any business was reached. Nothing slept in his hands. It was disposed of in its turn, for or against, as the merits seemed to demand.

He voted for the first aid that the State gave to start railways in the State, and aided to perfect the charter, and give two millions of State credit to the North Missouri Railway Company, of which company, in April, 1854, he became President, and of his connection with which we shall presently speak.

In March, 1853, and prior to the expiration of his term as State Senator, he was appointed by President Pierce the Assistant Treasurer of the United States at St. Louis, and resigned as State Senator. He was reappointed by President Buchanan, in March, 1857, and continued to hold the office until his second term expired, in March, 1861, when the republican party triumphing, a most worthy gentleman and supporter of that party was appointed to the position.

In April, 1854, he was elected President of the North Missouri Railway Company; re-elected in 1855 and 1856. A political combination was formed, and defeated him for President in 1857. After the election was over he went to his opponent and told him to feel easy in his position, as he should not seek to overthrow him, but would aid him as far as he could. A year rolled off, and the election came on again on the first Monday of April, and Mr. Sturgeon was re-elected to the Board, and he found hard work to get his friends to even keep his former opponent in the Board. He was elected President; his opponent of the year before was at the time sick. He went to him and told him what had happened, and what he had promised. "Now, sir," said he, "I come to tell you that I will hold the place until you are well enough to discharge the duties, when I will resign and I think I can have you re-elected President." He carried out his pledge, and in a month resigned, and had his opponent elected President. They falling to agree in their views as to the policy to be pursued to promote the best interests of the Company, at the next election a Board of Directors harmonizing with Mr. Sturgeon's views were elected, and he was again elected the President of the Company; but the Hon. Howell Cobb, the then Secretary of the Treasury of the United States, objecting to his holding the two positions of President of the Railway and Assistant Treasurer of the United States, he again resigned the Presidency, remaining in the Board until April, 1861, when he was superseded as Assistant Treasurer, and was again elected the President of the Company, and has remained such to this day.

In his hands its affairs have prospered, and through his untiring energy and perseverence it has recently obtained six millions of means, by which it will be enabled to bridge the Missouri River at St. Charles, extend the road north to connect with the system of Railways in Iowa at Ottumwa in that State, and construct a road from its main line twenty-three miles south of the Hannibal and St. Joseph Railway, extending through Randolph, Chatiton, Carroll, Ray, Clay and Platte Counties in Missouri, and touching Brunswick in Chariton County, Richmond in Ray County, and within six miles of Lexington, in Lafayette County, thence to Kansas City, where it will connect with the Union Pacific Railway, thence to Leavenworth, Kansas, to where a branch of the Union Pacific Railway is to be completed in two years, and thence to Weston, where it connects with the Platte County Railway, and through which it will reach Atchison in Kan-

sas, St. Joseph, Savanah, and Forest City, Missouri, and thence on to Omaha and Council Bluffs, and connecting with the Iowa Railways on the west, as well as on the east side of that State, and forming a connection with the three prongs to the Great National Pacific Railway—one at Kansas City, one at Atchison, and one at Omaha and Council Bluffs. The bridge built over the Missouri River, the North Missouri road, extended to Iowa on the east and on the west; when all is completed it will have about four hundred miles of railway; and owing to its situation, in our judgment must become one of the most important and paying railways in the country, for it will enjoy both a southern and eastern business, being equally valuable in both cases.

For the position it is in, all who are familiar with its history are aware that the credit is due to Mr. Sturgeon, who has been connected with it from the time he aided as Senator in perfecting its charter in the Legislature, and obtaining for it the first State aid, to this day; and it must be a source of no ordinary gratification to him to see his labors about being crowned with such glorious results for the road of his care, and for his State, and the city of St Louis.

His conduct at the time he was superseded as Assistant Treasurer of the United States at St. Louis, is worthy of imitation. On observing in the telegraphic despatches that a successor had been appointed, he at once addressed him a polite note, inviting him to call at the office, and was careful to give him all the information that was necessary to enable him to comprehend the duties, and discharge them without annoyance to his successor or the public. His kind and pleasant manner entirely dispelled any formality or coldness in his going out, and his successor taking the position, and made it pleasant to each.

On the 16th of December, 1858, Mr. Sturgeon was married in St. Louis to Miss Ann Celeste Allen, daughter of the late Beverley Allen of that city, who was a distinguished lawyer. He has two sons, the eldest named Thomas Edward Sturgeon, after his two brothers and father and grandfather, and the youngest Beverley, after a brother of his wife, and her deceased father. His brother Edward is engaged in the banking business in Louisville, Ky., and his brother Thomas is connected with him in business in St. Louis, and they live together. They have never been separated any length of time in their lives, and all three brothers seem to consider that any means that one has belongs to the other two as much as himself.

In giving to charities of any kind, Mr. Sturgeon exacts of all that his name shall never appear in any newspaper, or on any list of names. He does whatever his means may enable him, and then all publicity of the matter must end. He takes great interest in young men who are starting in life without means, and in orphan asylums, homes for poor widows, and the unfortunate generally. Were it in his power, no child or person would ever be treated cruelly, and no person would want for food, raiment, or shelter; and he believes it the duty of all good Governments to see that the unfortunates are provided for, and that cruelty be not allowed by parents or any one else to children, or to any persons under the authority of others. He believes that all laws should be so framed as not to allow any thing that conflicts with God's laws, and that any nation that will so act will constantly receive the favor of God.

He is earnest in all he undertakes. He is particularly noted for his energy and perseverance. The humblest man will, if any thing, receive from him more consideration than the man of wealth and influence. He feels that much of the happiness of the humbler classes in life is made up of kind words, and a considerate regard for their feelings. His sympathies always carry him to the weak. His friends think that his sympathies and desire to aid persons carry him too far. In administering a trust he is faithful and exacting. He may do as he pleases with his own, not with that which belongs to others. He inculcates on the part of all employes, the greatest civility to all having any business with the Company. Any one failing in this could not remain long in the service of the Company. His kind consideration to all connected with him in the management of the road is such that he endeared himself to all, and it gives them pain whenever they fail to make themselves acceptable in the discharge of their duties.

The following, which we take from the *St. Louis Republican*, evinces the estimation in which Mr. Sturgeon is held, and how his services are appreciated by those who know him best:

"Testimonial to I. H. Sturgeon, Esq.—Upon the occasion of the passage by the Legislature of the bill in relation to the North Missouri Railway, we spoke of the eminent service of the President of the road, Isaac H. Sturgeon, Esq., to whose untiring energy and zeal, in a large measure, was due the proper representation of the provisions of the bill to the members of the General Assembly. From the following resolutions, passed a short time since, it will be seen that the outgoing directory have a high appreciation of the good work done by Mr. Sturgeon:

Office of the North Missouri Railway Co.,
St. Louis, Mo., April 1st, 1865.

At a meeting of the Board of Directors of the North Missouri Railway Company, held this day at their office in the city of St. Louis, the following preamble and resolutions were unanimously adopted, viz:

*Whereas*, This is the last meeting that will probably be held by this Board, they deem it proper before their present official existence shall terminate, to give an expression of their opinion in regard to the President of this Company; therefore be it

*Resolved*, That it is the sense of this Board, that the untiring zeal and indefatigable efforts of the President of this Company, Isaac H. Sturgeon, to promote its interests, and especially his late success before the Legislature of this State in obtaining the means required for the construction of a bridge over the Missouri River at St. Charles, and for the completion of the road from Macon to the Iowa State line, and of the West Branch of this road, giving an independent line to this Company, the City of St. Louis, and the people of the State of Missouri, to Leavenworth in Kansas, and to St. Joseph in Missouri, entitle him to our warmest thanks and acknowledgments.

*Resolved, further*, That not only this Company, but the people of the City of St. Louis, and of the State of Missouri, owe him a lasting debt of gratitude for securing to them the benefits sure to flow from carrying out the improvements, the completion of which was provided for by the act passed at the recent session of the Legislature at his instance.

*Resolved, furthermore*, That the thanks of this Board be tendered to the Governor of the State of Missouri, the members of the General Assembly, and all who coöperated with our President, in securing this beneficent legislation for our road, the City of St. Louis, and the State of Missouri.

*Resolved*, That these resolutions be published in the daily papers of this city.

(Signed) GEO. W. BLOOM,
*Secretary N. M. R. R. Co.*

At the election of Directors held on the 3d day of April, 1865, Mr. Sturgeon and his twelve co-Directors were unanimously elected Directors of the North Missouri Railway Company, each receiving 4,445 votes being all the votes cast. By the recent legislation the Directors were to classify themselves by lot, or agreement, so that six should serve for two years, and seven for four years, from the date of their election. On their election the Directors unanimously exempted Mr. Sturgeon from drawing, and gave him the long term, and he was unanimously re-elected President of the Company, to serve for four years.

Mr. Sturgeon's career may be regarded as only fairly begun. With the qualities he possesses, if ambition should lead him, he may make one of our most useful of public men. —*Appleton's R. R. Guide.*

## SOUTHERN RAILROADS.

Concerning the railroads of the Southwest the *Chattanooga Gazette* gives the following:

After the Amnesty Proclamation, which is the most important matter now attracting the attention of the people of the South, the next question of importance is the railway communication. In the language of the Macon Telegraph "the South is bare of goods—the people destitute of the ordinary appliances of comfort and convenience which they had before the war. It is true this destitution has come upon us so gradually, and existed so long, that we have ceased to feel it as we should once have done; but when the reintroduction of goods, wares and merchandise once begins, then we shall begin *pari passu* to dicover our destitution and our necessities. We have discover that we are without good agricultural and plantation utensils, and very short of mechanical stock and implements—clothing scarce and scanty—furniture dilapidated—crockery broken—libraries out of date—school books worn and worthless—in short, that whichever way we turn there is a peremptory demand for reinvestment."

Railway communications being so badly broken up, it is much to be feared that the additional freight expenses before they be repaired will be nearly as costly as the repairs themselves. The Central road is so badly injured that it is doubtful whether it will be in full operation in a year's time. Meanwhile the enormous supplies necessary for this depleted country must, as things stand, either be brought down through Louisville, Nashville, Chattanooga and Atlanta, or from Savannah up the river to Augusta, from Augusta to Atlanta by rail, and thence down, or they may take the more precarious route by steamer to Darien, and thence up the Ocmulgee; or they might be shipped to Apalachicola, and thence up the Chattahochee and Flint, to Albany, or from Apalechacola to Fort Gaines or Columbus, and thence over the South Western and Muscogee Railways.

If it were possible to force through immediately the track lying upon that part of the Milledgeville & Augusta Road which is already graded between Milledgeville and Mayfield, it would shorten the railway transit of goods via Savannah about two hundred miles.

In this state of affairs that section of the South immediately below this point must look to the Northwest for its supply of food, its

articles of comfort, both personnl and mechanical, and for its stocks of goods, agricultural implements, and, in fact, everything that a civilized people need. With the completion of the Atlantic & Western Road, between Chattanooga and Atlanta, these supplies must begin to go forward, and Atlanta will in a short time become the depot for the State of Georgia.

On this road the Etowah River Bridge is burned, and from there to the Chattahochee river, the road is entirely destroyed, requiring the rebuilding of the superstructure. The Chattahochee River Bridge is also burned, and will have to be entirely rebuilt. Timber for both of these bridges is now being got out, and it is believed that trains will be able to through by July 1st. This fact is the more important to Western merchants, because Atlanta has railway communication with nearly a million of people in Georgia and contiguous States, who are to be fed and clothed from the Western marts. Trains from Atlanta run within twenty miles of Montgomery, and there is only one bridge to put up to complete the connection. As the roads from Savannah to Macon and Atlanta can not be repaired in less than five or six months, the route from the northwest through this city is destined to be crowded with freight and travelers.

## GREAT WESTERN RAILWAY OF CANADA.

REPORT OF THE DIRECTORS FOR THE HALF YEAR ENDING JANUARY 31, 1865.

The receipts on capital account have been reduced during the last half year by 72,680*l.*, being the amount of the six per cent. bonds, for 72,700*l.*, which became due and were paid of in October, 1864, less 19*l.* received on new shares paid up in full, leaving the total receipts on the 31st January, 1865, 5,145,675. The aggregate expenditure to the same date amounted to 5,092,186*l.*, leaving a balance to the credit of capital account of 53,489*l.*

The outlay on capital account during the half year consists of new sidings, &c., at sundry stations—fish jointing six miles of rails—proportion chargeable to capital of the amount expended in rebuilding in stone and iron four wooden bridges between Hamilton and London, and making up embankments, &c, at new bridges over the Cove of the River Thames west of London, and over the River Nith west of Paris—extension of line into the city of Toronto—new station and grain store at Dundas, and coal and timber wharf at Hamilton—laying water service in station yard at Hamilton—new engine shed and engineering workshops at Hamilton, machinery and steam hammer for rolling mill, &c., amounting altogether to 18,181*l.*

The revenue account for the past half year is as follows:

| | | |
|---|---|---|
| Gross receipts | | £313,729 |
| Working expenses, including maintenance of way, taxes, insurance, and rest of suspension bridge | 137,437 | |
| Balance | | £175,292 |
| From this there is to be deducted— | | |
| Int. on Government loan | £17,499 | |
| Int. on company's bonds &c. | 33,360 | |
| Loss on the conversion of American currency | 74,502 | |
| Renewals of rails, sleepers, brid's | 31,139 | |
| | 156,500 | |
| Balance from the half year's working | | £18,792 |
| To this has to be added— | | |
| Loss by exchange over estimated last half year on the American currency unconverted at Bank of Commerce | £8,415 | |
| Surplus from last half year | 10,961 | |
| | 19,376 | |
| Leaving a surplus of | | £38,168 |

From which the directors recommend a dividend at the rate of 2 per cent. per annum, This will absorb 35,598*l.*, and leave a balance to be carried to the credit of the current half year of 4,570*l.*

In the past half year gold quotations have ranged between 185 and 259¾. The monthly averages have been 226¾, while the average purchases made by the company have been at 205½. The reduction, therefore, of the available balance by the conversion of American funds into gold amounts for the past half year to 74,502*l.* It is proper to observe that owing to the temporary inability of the New York Central to forward all the through freight brought to Suspension Bridge, which is not paid for until finally delivered, a larger amount than usual appears in the balance sheet at the end of the half year as outstanding and due to the company on traffic account. The greater part of this amount is receivable in American currency, and a loss will accrue upon its conversion which will be charged to next half year's revenue. The increase in the value of stores on hand may be attributable in a great measure to the augmentation of price, when purchased with American currency. The instructions of the board to the executive are to purchase stores either in Canada or the States, or in England, on the most advantageous terms irrespective of the currency in which payment is made. The following table places in comparison the receipts and expenses of the last five half years:

| | | | |
|---|---|---|---|
| January 1863 | £309,304 | £136,199 | 44.03 |
| July, 1863 | 293,067 | 136,270 | 46.50 |
| January, 1864 | 301,634 | 135,988 | 45.05 |
| July, 1864 | 314,939 | 140,188 | 44.51 |
| January, 1865 | 312,729 | 137,437 | 43.95 |

The working expenses of the last half year are 43 95 per cent. of the aggregate receipts as compared with 44.52 per cent. on the preceding half year, and 45 05 per cent. of the corresponping half year, thus showing a reduction of 0.56 per cent. on the previous half year, and 1.10 per cent. on the corresponding half year.

It is gratifying to observe that during the pass half year there has been an increase in pasengers compared with the corresponding half year of 12,269 in numhen and 22,521*l.* in amount. But the freight traffic shows a falling off to the extent of 53,268 tons, and 13,455*l.*

Friendly relations with all the American lines have been maintained, and the best possible feeling continues to exist; but owing to border difficulties the United States Government instituted a passport system at the close of the last year, which, to a great extent, put a stop to the through passenger traffic between the eastern and western States of America, *via* Canada. It has also lessened considerably the local passenger business between Canada and the States. But the directors have now the satisfaction of stating that by proclamation from the Department of State at Washington, dated March 8th, this restriction has been removed.

The working of the New York Central in connection with the Great Western has for he last two monts heen most satisfactory; a temporary stoppage of through freight, as well as of through passengert, has heen the consequence.

For several years past the Great Western has been tenant of the Grand Trunk at an inconvenient temporary wooden passenger station in Toronto. But the corporation of the city of Toronto have granted to the Great Western and Northern the free right to build a single or double line along the entire length of the esplanade fronting Lake Ontario, and parallel with the Grand Trunk, which practically places the railway in just a position to all the wharves and principal warehouses in the city of Toronto. The grant made by the city has enabled the company to select a more eligible and central site at the foot of Yonge street for general station purposes, and arrangements have accordingly heen made for its purchase on very favorable terms.

The directors are happy to report that arrangements have been entered into with the Erie and Niagara, by which running powers over that line, on terms to be mutually agreed, or failing agreement, hy arbitration, have been secured for twenty-one years. This railway runs from Niagara to Fort Erie on the Canadian shore, opposite Buffalo, and will be worked by the Great Western during the first twelve months after its completion, under a guarantee which secure the company from loss. By this railway the Great Western, without incurring any responsibility, will have the advantage of a direct line to Buffalo on the same gauge as its own, and will secure a connection at Buffalo with both the New York Central and New York and Erie. The line is expected to be completed by the ensuing autumn, when the Great Western route between Buffalo and Detroit will be twelve miles shorter than by the Buffalo and Lake Huron route.

The report of the engineer shows the continued improvements which are being made in the permanent structure and condition of the railway. The rolling mill has proved its usefulness to the company in the large economy already effected in the cost of re-rolling, and in the superior quality of the rails. The rolling stock has been thoroughly maintained; extensive renewals have been made; yet the aggregate expenditure of the two departments for the half year (locomotive and carriages) has been reduced.

The Commercial Bank of Canada has appealed to the Judicial Committee of Privy Council against the judgment of the Court of Error for Upper Canada. The appeal is expected to he argued at an early date.

The traffic of the Detroit and Milwaukee, continues to be steadily developed, the earnings for the year 1864 having been as follows compared with those of 1863:

| | 1864. | 1863. |
|---|---|---|
| Gross receipts | $1,323,402 | $1,026,059 |
| Working expenses | 884,758 | 621,034 |
| Surplus | $438,644 | $405,024 |

The ordinary interest charges, amounting to $399,967 have been paid out of the surplus of last year, and the balance, together with the balance remaining from the previous year, has been applied in necessary outlay for construction and renewal purposes. It will thus be seen that the no portion of the arrears of interest due to the Great Western has been discharged.

☞ Measures have been taken to consolidate the Toledo & Wabash Railroad with the Great Western Railroad of Illinois.

## MONETARY AND COMMERCIAL.

There have been but few disturbing causes operating on the money market since our last weeks issue. The variations in the status of gold have been very limited, and towards the close of the week the market exhibited signs of weakness. With full confidence abroad in the stability and permanent character of our government, and its ability to meet its obligations, together with the unquestionable evidence that has been forced upon the world by the rebellion, that we are entitled to rank as the most powerful belligerent nation on the earth, peaceably disposed yet able to cope with any, or even a powerful combination, with all the internal elements of wealth and inexhaustible resources for conducting war on the most extensive scale, which will have a strong influence in protecting us against chances of foreign war, and raising our government bonds above their par value, as the interest we pay is nearly double that paid by the government of Europe for bonds certainly no better secured than ours. The consequent absorption of our securities abroad, nearly all of which are at present held at home, together with the rich promise of the incoming harvest, must before long have its proper influence on the price of gold. Operators may for a short time continue to make use of all sorts of rumors to affect first a rise and then a fall, to be repeated over again from one day to another, to enable them to still use gold as an article of speculation, but the time is not far off when their occupation will be gone, and specie will be the standard and common currency of the country. The general inactivity of business at this season of the year is sufficient cause for a light demand for loans, which are made at from 6 to 10 per cent. The supply of Exchange is reported as short of the demand, and rates firm at quotations:

| | Buying. | Selling. |
|---|---|---|
| N. Y. Exchange | par. | 1-10c prem. |
| Philadelphia | par. | 1-10c prem. |
| Boston | par. | 1-10c prem. |
| Baltimore | par. | par. |
| Gold | 35 prem. | 26@27c prem. |
| Silver | 23@25c prem. | 26@28c prem. |
| Vouchers city | 2@3c dis. | |
| Vouchers country | 5@15c dis. | |
| Certigcates | ½c dis. | par. |

The Secretary of the Treasnry has issued a statement of the pnblic debt due May 31, 1865, of which the following table is the recapitulation.

| | Amount outstanding. | Interest. |
|---|---|---|
| Debt bearing interest in Coin | $1,108,113,843 80 | $64,480,489 50 |
| Debt bearing interrst in lawful Money | 1,053,476,371 04 | 60,158,384 52 |
| Debt on which interest has ceased | 786,270 09 | |
| Debt bearing no interest | 472,829,270 57 | |
| Totals | $1,635 205,753 50 | $124 638,874 02 |

LEGAL TENDER NOTES IN CIRCULATION.

| | Amount. |
|---|---|
| One and two year 5 per cents. Notes | $50,8[illegible]6.380 |
| United States Notes, old issue | 472.663 |
| United States Notes. new issue | 432,687,966 |
| Compound interest Notes, act of March 3, 1863 | 15 000.000 |
| Compound interest Notes. act of June 30, 1864 | 160,143,620 |
| Total | $659,160,599 |

—The general Railway Share market is dull and the sales are unusually small. It is a noticeable fact that in the face of this protracted dullness, and in spite of the efforts of sellers for a fall, stocks generally are scarce and for delivery commenced in many cases ⅛@¼ per cent per day. The chief argument used against the market is the decrease of traffic to be caused by ending the Rebellion. People who urge this theory ignore the fact that, during the war the North has made steady progress in production and population, and has now enough of both to yield the Trunk Railroads all the business they can do. Taking the Erie Railway to illustrate, the natural growth of the business of the country, and the following result is shown:

Total earning in 1859.....$4,567.030
Way traffic in 1864..... 3,463,178

The year 1865 will show a still greater growth of local traffic, and at no distant day the Company will have from this branch of trade as much traffic as it gets from its through business. The Trunk roads, Erie, New-York Central, Pennsylvania Central and the Baltimore and Ohio roads, can not help advancing in value in the ratio of the increase of the population and business of the country, and their stocks must soon become far more valuable than any railway bonds.

—The bear movement upon the Chicago and North Western preferred Stock is sustained by the persistent assertion that the dividend recently declared has not been earned, and that no dividends can be expected on that stoch in the future. The following figures will show how much reason there is in such statements:

Gross earnings on all the lines, excepting the Peninsular, from June 2, 1864, to May 21, 1865, 11 months and 3 weeks.$6,591,904 67
Same period in previous year on same lines..... 3,512,896 06

Increase 46 per cent.....$2,079,008 61

Operating expenses have never reached on this line 65 per cent of gross earnings.

Allowing at the above rate, we have on $6,000,000 the proportion of gross earnings pertaining to the company's own lines:

Net earnings.....$2,100,000
Required for interest on all the Company's bonds, the new issue included..... 875,000

Leaving net earnings applicable to dividends on stock, &c.....$1,225,000

—The receipts on the Grand Trunk Railway, for the week ending May 20, were: Total, $122,893; corresponding week last year, $102,350; increase, $20,543.

The following table shows the earnings of the Chicago & Northwestern Railroad from June 1, 1864, to May 21, 1865 (11 months and 3 weeks):

| | | | |
|---|---|---|---|
| Passenger | $1,287,957 17 | $2,091,489 71 | $803,532 54 |
| Freight | 3,066,790 36 | 4,310,988 69 | 1,244,0 8 22 |
| Express | 53.597 29 | 81,938 82 | 28.342 43 |
| Mail | 61,223 51 | 66,435 1 | 5,210 90 |
| Miscellaneous | 43,228 53 | 41,053 04 | |
| Total | $4,512,896 06 | $6,591,904 67 | $2,081,284 20 |

Being an increase of 46.07 per cent over last year.

—The New-York Central earned in May:

1865 (as reported).....$1,204,435
Same time 1864..... 1,004,435

Increase..... $200,000

—The following is an official statement of the business of the Office of the Assistant Treasurer of the United States, in New York, for the month ending May 31, 1865:

RECEIPTS AND DISBURSEMENTS.

May 1, 1865, by balance

Receipts during the month—

| | | |
|---|---|---|
| On account of Customs | $8,230,195 32 | |
| On account of Loans | 16,136,586 37 | |
| On acc't of Internal Rev | 595,851 10 | |
| On acc't Post Office Dept | 140,598 06 | |
| On account of Transfers | 11,000,100 00 | |
| On acc't of Patent Fees | 9 068 90 | |
| On acc't of Miscellaneous | 61,836,666 01 | —97,939,875 86 |
| Payments | | 97,939,875 86 |
| Debit balance April 30 | 7.816 656 23 | |
| Treasury Drafts | $84 901 462 11 | |
| Post-Office Drafts | 190,372 96 | —92,908,461 29 |
| May 31, 1865, Balance | | $5,031,384 57 |
| By Balance, Cr. Disbursing Accounts | $26,374.680 35 | |
| By Receipts during month | 104,859.280 47. | $131,233,880 82 |
| To Payments | | 80,365.454 17 |
| Balance | | $41,868,426 65 |
| By Balance Cr., Interest | 13,686,563 14 | —13,686,563 14 |
| To payment in coin | $10,292,804 10 | |
| To payments in notes | 32,125 34 | |
| | | 10,325 925 44 |
| Balance | | 3,360,637 70 |
| By receipts for Customs in the month of May, 1865 | | $8,230,195 32 |
| By receipts for Customs in the month of May, 1864 | | 3.807,058 37 |
| Increase in the month of May, 1865 | | $4,323,136 95 |
| By Balance, Cr., Bullion and Expense Account for Assay Office | | 937,600 12 |
| By Coin received during the month | $537,923 52 | |
| By Fine Bars received during the month | 200.497 60 | |
| | | 738.331 12 |
| | | $1,675,940 24 |
| To payments in Coin | 247,528 59 | |
| To payments in Fine Bars | 1 2,451 27 | |
| | | 359,979 66 |
| Balance | | $1,315,960 58 |
| By Funds in hand in Assistant Treasurer's Office | $50,260 448 92 | |
| By Funds in hand in Assay Office | 1,022.628 01 | |
| | | $51,283,076 03 |
| By Fine Bars in Assay Office | $139.233 02 | |
| By Unparted Bullion in Assay Office | 1,452,513 00 | |
| By Bullion at the Mint for Coinage | 5.863 62 | |
| | | $1,597,609 64 |
| | | $52,8[illegible]0,686 57 |
| Less Temporary Loan to be reimbursed | $2.501,854 10 | |
| Less Due Depositors | 1,395,096 64 | |
| | | $3,896,850 74 |
| Balance | | $48,983,735 83 |

STATEMENT *of Business at the United States Assay Office at New-York, for the month ending May* 31, 1865.

| | | |
|---|---|---|
| Deposits of Gold | | $315,000 00 |
| Foreign Coins | $6 000 00 | |
| Foreign Bullion | 7,000 00 | |
| United States Bullion | 302,000 00 | |
| Dep'ts of Silver, incl'dg purch's | | 27,000 00 |
| Foreign Coins | 7,550 00 | |
| Foreign Bullion | 14,000 00 | |
| U. S. Bullion (contain'd in gold) | 4,000 00 | |
| Old Coins | 700 00 | |
| Lake Superior | 250 00 | |
| Nevada | 500 00 | |
| Total Deposits payable in Bars | 81,000 00 | |
| Coins | 261,000 00 | —342,009 00 |
| Gold Bars, Stamped | | 694,488 79 |
| Transmitted to U. S., Mint, Phila., for Coinage | | 545,329 00 |

—The revenue and expenses of the European and North American Railway, for the year ending October 31, 1864, was as follows:

Revenue:

| | | |
|---|---|---|
| From passengers | | $64,292 52 |
| " freight | | 71,999 74 |
| " mails and sundries | | 8,765 60 |
| | | $145,057 86 |

Expenses:

| | | |
|---|---|---|
| Locomotive power | $33,691 99 | |
| Merchandise & passenger cars | 22,008 64 | |
| Maintenance of way & buildings | 26,295 04 | |
| General charges | 21,634 45 | |
| | | 103,630 12 |
| Net revenue | | $41,427 74 |

—The gross traffic of the Erie for May exceeds $1,700,000, and is greater than the April gross. The passenger receipts are over $400,000, and show an increase of 100 per cent—a gain made without running a single additional train. J. F. D. Lanier, Esq., has been elected a director of the Erie Railway Co., to fill a vacancy. His accession to the board is a valuable addition to its financial strength.

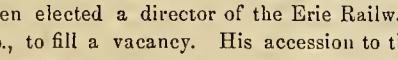
—The Rock Island Railroad earned the third week in May:

| | |
|---|---|
| 1864 | $43,441 |
| 1865 | 50,493 |
| Increase | $6,052 |

—The Michigan Central Railroad earned for the third week in May:

| | |
|---|---|
| 1865 | $102,917 48 |
| 1864 | 66,420 18 |
| Increase | $36,497 31 |


## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

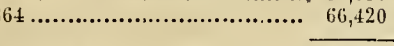
H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

## MONDAY MORNING, MAY 8,

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING ONE THROUGH TRAIN between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at 8:00 A. M; arrive 8:40 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my1

## *STEAMSHIP COMPANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS, between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | | |
|---|---|---|
| WASHINGTON | 3,204 tuns, | 900 horse-power. |
| LAFAYETTE | 3,204 tuns, | 900 horse-power. |
| EUROPE | 3,254 tuns, | 900 horse power. |
| FRANCE | (afloat), | 900 horse-power. |
| NAPOLEON III | (afloat), | 1,100 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table-wine) ..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its exuivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co.

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building) | 3,412 | ——— |
| ENGLAND (now building) | 3,430 | ——— |
| SCOTLAND (now building) | 3,430 | ——— |
| ERIN | 3,310 | Grace. |
| HELVETIA | 3,315 | Prowse. |
| PENNSYLVANIA | 2,872 | Grogan. |
| VIRGINIA | 2,872 | Lewis. |
| LOUISIANA | 2,166 | Aspiett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL..... $100.
STEERAGE PASSAGE TO LIVERPOOL.... $35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to
WILLIAMS & GUION, No. 71 Wall street.
For steerage passage apply to
WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). —The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN | $90 00 | STEERAGE | $30 00 |
| First Cabin to London | 95 00 | Steerage to London | 34 00 |
| First Cabin to Paris | 105 00 | Steerage to Paris | 40 00 |
| First Cabin to Hamburg | 100 0 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.
JOHN G. DALE, Agent,
No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR ..... 2,595 65-95 tuns.
WILLIAM R. BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage ..... $150
Second Cabin Passage ..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge.

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
JAMES A. RAYNOR, No. 10 Barclay street.

## CENTRAL RAILROAD
—OF—
## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:30 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a.m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

JOSIAH O. STEARNS, Superintendent.

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 6:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 6:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m.; 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 6:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

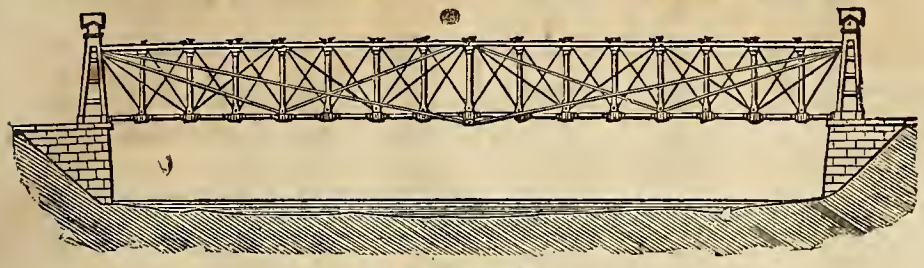
JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD.

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m., and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections.

## FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '61. ly. Letter Box, 1362. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible] Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without horing), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive En-

419 y 1

---

## KNOX & SHAIN,
## Engineering and Telegraphic

INSTRUMENT MAKERS,

**PHILADELPHIA**

---

## JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

# GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

# FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL.

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

# CHILLED WHEELS

—AND—

# TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS.

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles,**

Manner, at horteste, and on th

Most Reas Terms.

---

## Manufacturers, Importers & Dealers

—IN—

## RAILROAD, CAR,

—AND—

## MACHINE SHOP
## SUPPLIES,

—AND—

## MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

## RAILWAY SPRINGS.

**FREIGHT**

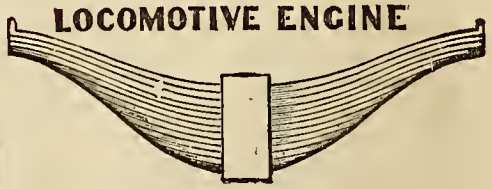




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledge himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,
## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on mission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more o the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHING. TON CITY.

W. P. SMITH. *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A M. | 9 45 P. M |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Buses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

# OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis. Cairo, St. Joseph, Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St, Louis and Cairo Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M. & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
General Ticket Agent.

W 1. GRISWOLD nera' Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis. at which place unites with Railroads for and from all points in the West and North-west.

# SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 6:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, Cincinnati Agent.

# MOSELEY'S

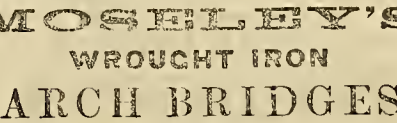
**WROUGHT IRON**

# ARCH BRIDGES

—AND—

# Corrugated Iron Roofs

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2. MOSELEY & CO.
BOSTON, MASS.

# EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

# CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

# FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

THE SCHENECTADY

# LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

# PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¾ to 10 inches outside diameter, cn to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—2½ to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**

# FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M night.

On Sundays, 4.30 A M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East a Wes

WM. TEARNS Supt

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. - - - } Editors

CINCINNATI:

THURSDAY, JUNE 15, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 8:15 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| *Atlantic & Great Western—* | | |
| | 8:00 A. M. | 8:40 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:45 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond, Chicago and Indianapolis | 7:00 A. M. | 9:45 P. M. |
| Toledo, Detroit and Bellefontaine | 6:00 P. M. | 10:20 A. M. |
| Richmond and Chicago | 7:00 P. M. | 12:35 P. M. |
| Hamilton Accommodation | 11:30 P. M | 6:45 A. M. |
| do do | 7.00 A. M. | 8:05 A. M. |
| Dayton Accommodation | 2:20 P. M. | 9:45 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Chicago and St. Louis Express | 7:00 A. M. | 12:00 M. |
| Springfield and St Joe Express. | 1:00 P. M. | 5:00 P. M. |
| St. Louis and Chicago Express | 4:00 P. M. | 2:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 4:50 P. M. | 8:35 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:40 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 6:50 A. M. | 1:00 P M. |
| Seymour Accommodation | 3:45 P. M. | 5:00 A. M. |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 7:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 8.00 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:55 A. M. |
| Evening Express | 1:35 P. M. | 6:00 P. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## TRADE AND RAILROADS FROM THE CENTRAL WEST TO THE SOUTH.

Now, that the country is pacificated, and that commerce with the South is about to be renewed with full vigor, it becomes an interesting question. What are our communications? and what are our means of exchange? To begin with the last—*money* is the great medium of exchange, and if, as many suppose, the South has no money, this deficiency will certainly present the greatest difficulty in the way of commerce. But, from some inquiries as to Southern products, we are satisfied that the deficiency of money in the South will soon be supplied. After comparing all facts and opinions, there can be little doubt that there are in the South 2,000,000 bales of cotton, which in a short time will be ready for market, and there are immense quantities of tobacco, rosin, tar, &c. The whole value of these products can not be estimated at less than *two hundred and fifty millions of dollars.* Comparatively little of this is wanted in the South and the whole becomes an active basis of trade. Whoever has property can get money. So the South can have two hundred millions of ready money in the next six months, or, in other words, it can have either the money or the exchanged products. We may expect then that the North will sell to the South in six months two hundred millions of dollars in products of industry; we will say half for cash and half credit. This will create a great and ready trade, which will stimulate Northern industry, and furnish the South with necessaries for immediate use and money for exchange. A very large part of this trade will be with the central west. The South wants *bread,* as well as *all manufactured articles.* It wants bread, clothing, domestic furniture, agricultural tools, railroad iron, &c. Of these, bread, furniture, iron and tools, and perhaps some clothing must come largely from the North-West. The main part of the cotton is in the South-West, and hence, the trade between the South and the North-West will soon reach a measure far beyond anything heretofore known. The numerous steamboats already daily departing from Cincinnati for Memphis, Nashville, Vicksburg and New Orleans are the first evidences of the rising tide of trade; and this too when that tide has not reached the tenth part of its coming volume. We think, after careful examination, that we are not mistaken in anticipating in the next twelve months an increase of the commerce of the western ports unprecedented in commercial history.

We come now to the communications; all the great lines of water courses remain the same. Nature keeps them beyond the devastations of war. We have thirty thousand miles of *coast,* in the valley of the Mississippi; and every mile can be reached by steamboats. This immense coast is strewed with towns nd cities, from the little hamlet on the forest covered shores of the Mississippi, to the magnificent queen of the west, dwelling on the Ohio. The great waves of immigration will soon fill the towns and cultivate the fields, and increase commerce, till every nerve of active life is stimulated to its utmost vigor. The long night-mare of slavery is over. The devastitions of war have ceased. Labor is free, and the genius of man, no longer restrained by artificial obstacles, or weighed down by the calamities of war, inspired with new hope, goes out to rebuild the waste places, erect new homes of industry, and create new wealth from the resources of nature. If we had no channels of commerce but these great water courses, the result would still be grand. But we have contrived new highways. The railroad must cross the valleys and around the hills, where water would not go. We have made these iron highways by thousands of miles; but there are still portions of the central west where more railroads must be made, or our national resources will not be fully developed. Immediately south of Cincinnati, there is a district containing *one hundred thousand square miles of territory,* full of great natural elements of wealth, which is almost wholly without railroads. This region contains nearly all of West-Virginia, South-West Virginia, East-Tennessee, West-North-Carolina and East-Kentucky. The Marietta road on the east of this section just enters a corner; and the road in South-West Virginia does not connect, except by a circuitous route, so that much must be done, in the construction of lateral as well as direct lines of railroad, before the resources of that country will be brought out, or Cincinnati enjoy the benefits of this trade, which should be exclusively her own. How long before Cincinnati will wake up to her real interest? We have now ostensably a Southern railroad, and what is that? The Covington and Lexington railroad, only about 100 miles in length. This road scarcely begins to touch the region we have described. Besides, this road tends too far west. There ought to be eastern branches made, or rather there ought to be a line made through Richmond (Ky.) with a branch to the Big-Sandy, and a connection by or near Cumberland Gap with Knoxville. This would gives us a *direct trade* with Eastern Tennessee, South-West Virginia and Northern Georgia. Then let another railroad (as has been long planned) connect the Central Virginia railroad with the Ohio valley, by either the Gyandotte or the Kanawha route; and then (and only then) we shall have a system of railroad connections with the South which will give Cincinnati, Ohio, and the whole central west the advantage of those vast natural resources south of Cincinnati. Thirty years since, when no railroads were in existence south of the Ohio river, some little trade was carried on with Knoxville, and, within the last twenty years, with Northern Georgia. If there were but a

single line of railroad directly south from Cincinnati, the trade with those districts, and with others far beyond, would be very large, and Cincinnati manufactures and western products would penetrate, by this line, Georgia, North-Carolina, and even South-Carolina. The present route from Knoxville to Cincinnati is:

| | |
|---|---|
| Knoxville to Chattanooga | 112 miles. |
| Chattanooga to Nashville | 151 " |
| Nashville to Louisville | 185 " |
| Louisville to Cincinnati, by boat | 120 " |
| Aggregate | 568 miles. |

This is the best route which can be had from Knoxville to Cincinnati, unless it be varied by taking steamboat at Nashville; but in either case, there must be a transhipment, and nearly 600 miles of travel. Now, from Cincinnati to Knoxville by a good railroad line it is not over 260 miles, or less than half the distance! There is probably not to be found in the United States another example of so much utter neglect of great interests as in this case.

Suppnse now it were desired to reach Covington (Va.) a point in the very heart of Virginia, and which the Virginia Central railroad has reached. It could not be done from Cincinnati under less than 600 or 700 miles of travel (we mean for merchandise) for it would be more expense to wagon it to the Kanawha than to take it round by Baltimore. Thus, we see there is an immense (and, although mountainous, ultimately to be a very rich) country, whose trade belongs to Cincinnati, now almost cut off, and trading with points not in the line of their natural communication. The war is now closed. The trade with the South will be immense. The wealth of the country is great and increasing; and there is no reason why some of its capital and enterprise, both now so abundant in the valley of the Ohio, should not be put forth, in connecting by rail these geographically near, but commercially remote, section of the country.

## ON THE MECHANICAL CONDITIONS OF RAILWAY WORKING TO PREVENT DESTRUCTIVE WEAR AND RISK.

BY W. BRIDGES ADAMS.

[Continued from page 193.]

Having obtained successful results in the elastic action both of wheels and rails, the next question was to obtain a true mechanical act on in the movement of wheels and axles. As far back as the year 1837 the writer had sought to impress upon railway authorities the importance of radical movement in the axles, enabling them to rnn at a right angle with the rails, whether on straight lines or curves, and proposed various modes of accomplishing it, but he could get no attention. The railways were made in what were called straight lines, though practically crooked lines, and it was taken for granted that the coming of the wheel tires accomplished all that was wished. But in America crooked lines obtained with very sharp curves, in order to go around street corners instead of outside the towns, and a bell was suspended at the entrance, to be struck by the engine, and a notice painted on a maple slab, "Look out for the locomotive, when the bell rings." To facilitate the movement of the engine round the curves, the front end was provided with a swiveling truck, called a bogy, analogous to the ordinary under-carriage of a road vehicle, moving on a centre pin, but with four wheels instead of two, the wheels being guided by their flanges against the rails instead of by a pole. This was so convenient, that it came into general use in America, and it was first introduced into England on the Birmingham and Gloucester line, the engines being made in America. But it was defective in principle. In ordinary under-carriages on the road, the length of the pole steadies the wheels. In the four-wheel bogy, the distance between the front and back wheels was less than the width between the rails, and, consequently, swiveling on the centre pin, the bogy was apt to run unsteady, and drag the wheel flanges against the rails, the contact with the outer rail on curves setting the axles askew to the rails. This evil was continued on the South Devon line, where, the sharp curves necessitating the use of the bogy, it was applied on a seven feet gauge with the wheel centres five feet apart. In addition to this defect, apparently resorted to to compensate in some measure for the fixed parallelism of the axles, it did not in any way belo the skew position of the driving wheels, as the central pivot did not permit lateral movement of the bogy. To remedy this Mr. Bissell, in America, devised a plan of removing the centre pivot from midway between the four wheels to a point between the driver and the bogy; thus the movement of the wheels became radial, or in the circumference of a circle, instead of the centre. This was a plan on which the writer had built road carriages long previously, under the name of Equirotal carriages, and had proposed to apply the principle to engines. Mr. Bissell subsequently applied the same principle to engines with two wheel bogies, and time and circumstances having forced on the attention of English engineers the necessity for radial movement, other attempts were made to correct the defects of the bogy, and one was by providing a lateral slide as well as pivot movement to the centre. But on this plan the guidance was lost, and it was not found to answer.

Seeing that the time was approaching for more perfect machinery and for radiating axles, the writer again set to work to simplify the structure. Abandoning the truck form, or bogy, altogether, the axle boxes were adapted to slide in curved lines laterally through the horn plates of a rigid engine frame beneath the spring bearings. The advantages gained by this were, first, true radiation of the axle to every curve, from the straight line down to one chain an a half radius; secondly, perfect guidance and prevention of irregular movement in the wheels; thirdly, facility in axle bearings and lubrications; fourthly, the use of larger wheels than could be obtained by the bogy system.

The writer proposed to build the engine with coupled driving wheels in the centre, and with radial wheels at the ends, eight wheels in all, and so, having ample support, to dispense with a separate tender. This was so novel a plan, departing from the customary bogy system, that it was not listened to, and bogies were continued.

The writer sent a drawing to Mr. Cross, the engineer of the St. Helen's, and about nine months after received a letter from that gentleman stating that after having found it necessary to use larger engines for his increasing traffic, he had studied the whole question carefully as to the best principle nf radiation for his sharp curves; and having come to the conclusion that the plan of the writer was the simplest, safest, and most effective, as well as the least costly, he had constructed a model and verified it experimentally, after which he put in hand a full sized engine. (A large sized model frame of this may be seen on the table.)

After working for some time on the St. Helen's, both for passengers, goods, and coal, and perfectly establishing the soundness of the principle, this engine, called the "White Raven," was brought to London for experiment, and examined and experimented on by a large number of railway engineers, whose judgment confirmed the truth of the principle of structure.

It was at first supposed that the free movement of the wheels would tend to make the engine unsteady on straight lines at high speeds, inasmuch as front wheels, fixed laterally in the horn plates, were supposed to exercise a steadying and governing power. But the contrary proved to be the fact. Another engine, altered from the rigid system to the radial, was found to run much steadier after the alteration, after acquiring the facility for rounding sharp curves. In truth the unsteadiness of all engines, apart from bad construction, arises from the fact that the wheels, fixed to the frame and seeking the path of least friction over unever rails, force the frames to partake of their irregular movement; and, as might be expected, the inertia of the engine frame keeps it steady enough when the wheels are left free to pursue their own courses unshackled.

This novel arrangement comes at a convenient time, as the extension of railways through towns and mountainous countries is now the prevalent thought. But even for what are called straight lines, their extension into and through towns, and new station accommodation, renders it very important to have engines working round very sharp curves, and either end foremost. The great cost of land and the removal of buildings in approaches where only straight lines of very large curves can be used adds very materially to the cost of construction. But these is another question, quite as important. It is well known that the rapid wear of the rails of railways is very largely owing to the weight of the engines, apart from the train, and in the engines the destruction by rail crushing is increased in proportion to the weight on the driving wheels. Some engines have only one pair of driving wheels, as they involve less impedimental friction at high speeds. Some have two pairs coupled together, and some three pairs. Inasmuch as the engine draws the load by reason of its own weight on the wheels giving adhesion, it follows of course that a heavy train needs more weight nn the driving wheels than a light one. When a single pair of drivers are used the load sometimes approaches to fourteen or fifteen tons, and this crushes both rails and tires. If, however, the load can be distributed over more wheels, this destruction may be avoided. Twenty tons on four wheels is much less damaging than fourteen tons on two wheels. For this reason our continental neighbors have been aiming at two things combined—to obtain the adhesion of many wheels with the facility of passing round sharp curves. The ordinary method of coupling wheels by side rods does not admit of this, and the writer has resorted to another method, illustrated by

the model on the table, which, as regards its eight lower wheels, is precisely similar to the St. Helen's engine, the "White Raven." But in addition to this, it has four other wheels, two of which are placed at each end resting between the central driving wheel and the end radial wheel on their peripherics, pressing downwards with any amount of weight needed to induce adhension. In fact the whole weight of the engine and frame may be supported by the upper wheels if needed. But practically a comparatively small weight is needed, as the wheels do not merely rest on one another, as is the case with the wheels on rails, but have also a wedging action, may, if permitted, produce an intense pressure. All the wheels have also spring tires, which ensures elastic contact and fit, without blows. It will be seen that when the driving wheels are put in motion, they communicate that motion by friction to the upper wheels, which in turn communicate the motion to the radial wheels, and continue to do so when the radial wheels are on curves, the effect being that the axles of the upper wheels depart from the horizontal line, dipping to right or left according to the lengthening or shortening of the distance between the lower wheels on curves. And the adhesion is perfect, because the load on the upper wheels forces down the lower wheels to a perfect pressure on the rails at either end of the engine. Thus there are eight drivers which may be equally loaded and the whole weight of the engine is available for adhesion. And in reversing, for the purpose of retardation, the whole of the wheels are available. To make the machine complete, brakes are applied between the driving wheels, arranged to act both against the wheel and rails by small steam cylinders, so that the retardation of the engine is within the control of the driver by simply turning his regulator and steam cocks, without needing the muscular force of his fireman, laboring at a screw with slow movement. It will be seen that this engine will run on S curves as easily as on regular curves.

Of course the steam power of an engine should be in proportion to the adhesion. Practically it is far in excess of the adhesion, inasmuch as sand is commonly used to prevent the slip of the wheels; and this, though useful to the engine, is a serious disadvantage in increasing the resistance of the train. This seems certainly the case on the Great Northern, where it is found advantageous to make the tender wheels drivers, as well as those of the engine, with the same boiler power.

In the early days of railways the difficulty of adhesion between a smooth tire and smooth rails was considered to be great, before it was tried. But in those days the trains were light, and the increase in weight has again drawn attention to the desirability of increasing the adhesion. Racks on the rails and wheels might no doubt be used, as they have been, and as they are still in some collieries; but this can only be for very slow movement. Yet there is a mode of increasing adhesion not yet resorted to, but which will probably be resorted to, where the whole difficulty of mounting steep ascents, such as one in twelve, or 440 feet to the mile, shall occur on any sharp curves. It is to convert the rounded flanges of the wheel tires into two flats at angle of 45 degrees, and enlarging them to take a corresponding groove formed in the surface of the rail. The driving wheels of the engine only are to be fitted to these grooves, and the ordinary flanges of the train wheels can easily pass, being of smaller size. It may be remarked, that it would not be easy to lay rails accurately enough for this, and especially on curves, but compensation can be easily provided by the use of spring tires sliding laterally on the wheels, and there is no reason why the eight coupled engine before described should not work perfectly well in this mode, on sharp curves and stiff gradients. The pair of wheels on the table illustrate this principle of spring tires with angle flanges working in V grooves. The diagram on the wall illustrates this.

Thus with radial axle, spring tires, angle flanges, and elastic permanent way, several difficulties are got over. The blow and sledge movement is removed from between wheel and rail, as well as the grinding action against the flanges, and the adhesion is ensured, while the permanent way is rendered really permanent.

It may be objected to that the angular flanges will tend to wear away both tires and rails. This is quite true, but if we want to do hard work we must pay for it in some shape or other. The only question is, is it worth doing, and if so, what is the least costly method as well as the most effective and simple. We know that we can drive machinery by friction pulleys, and there is no mechanical reason why we should not drive railway trains. And these tires can be removed and replaced with perfect facility without needing workshops.

But it is not merely the question of engines that we have to deal with. It is that of carriages and wagons also These vehicles have been kept short, and their wheels disadvantageously near together, chiefly on account of the difficulty of curves. This system needs remodeling, but there are so many considerations that it must be deferred to another paper.

*Discussion.*—Mr. Rochussen fully agreed with the principle laid down, that in order to neutralize as much as possible the wear and tear of materials by friction, they should have elasticity, and that elasticity might easily be promoted by the improvement of materials themselves as pointed out in the paper. There was no doubt the introduction of steel into the manufacture of rails tended to add to the durability of the rails as well as to introduce the element of elasticity to a large extent. The Bessemer process enabled them to produce steel rails at a comparatively low cost; at the same time it had not superseded the description of steel rail which was largely used on the continent, viz: the puddled steel rail, by which the tendency to split, spoken of in the paper as occurring in the common iron rail, was obviated and the advantage of puddled steel was, that it welded well with iron. Thus they had a flat-bottomed or Vignolles rail, which was still used to a large extent on the continent, consisting of a head and web of puddled steel, and an iron base. The welding of the steel and iron was complete, and while this combination gave a harder surface to the tread of metal, the elasticity of the iron was retained. He had seen the advantages of that combination of material at the Hamm station of the Cologne-Minden railway, the traffic of which was equal to that of Cresse, where steel headed rails with iron web and base had been in use for ten years and showed no signs of wear. Bessemer steel would not weld well with iron, and therefore it was best adapted for the doubled-headed rail. As far as the elasticity of rolling stock was concerned, he greatly admired the plan of Mr. Adams, of introducing an elastic material into the tire of the wheel. But he (Mr. Rochussen) would remark, that the combined steel and iron he had spoken of in rails was also applied to wheels, and offered all the advantages of elasticity contended for. Both wrought and cast iron disks in straight section were objectionable, whilst in a corrugated section the wheels have a power of contraction which counteracted the force of the blows; and, on the other hand, they had but little vibration laterally. The great advantage of the disk wheel was that it did not raise the dust as the spoke wheel did, and obviated the great atmospheric resistance which the fan-like motion of the spokes created. With regard to the system advocated by Mr. Adams, he would ask how it could be ascertained when the piece of *lignum vitæ* or other wood inserted between the wheel and the tire showed signs of decay, as it was completely hidden from view, and there were no visible means of knowing when it became in an unsound state. While on the subject of disk wheels, he would remark that wrought iron disk wheels, which were much in use on the continent, were working their way gradually in this country. In the Exhibition of 1862 a manufacturer with whom he was connected showed some driving wheels on the disk system, which weighed 2½ tons each, made of cast steel, that material being considered better than wrought iron; but it appeared that wheels of that description were greatly affected by severe changes of the temperature of the atmosphere, and in one night no fewer than nineteen of those wheels cracked, while there was no instance of wrought iron disk wheels having given way under atmospheric influences. The iron was forged from the bloom, with a hammer weighing five tons, and the cast steel tire was batted on to the T-piece of the disk, or a puddled steel tire was used and welded to the disk, and as the steel surface of the tire wore off, it could simply be turned down, and another steel tire slipped over it, but hitherto no instance of the wearing out of such a wheel had occurred. The axles are not keyed in but pressed into the wrought iron nave with hydraulic power.

Mr. Dennet felt much indebted to Mr. Adams tor the paper he had read, but he wished that gentleman had gone a step further, and had given them a little more information as to the means of avoiding many of the risks of railway traveling. With regard to wear and tear of the line and plant, it was a question of great importance, in which the shareholders of railways were very much interested. There was an invention connected with this part of the subject to which he would call attention. The inventor of it, Mr. Jowett, he had hoped would have been there that evening to explain it, but his sudden and unexpected death within the last four days had deprived them of the valuable information which he would have furnished. The invention alluded to was a form of fish joint, models of which were on the table for the inspection of the meeting. For this invention he had received but £12 10s., whilst it had been disposed of to a company for £21,000 and they had realized from it £80,000. Mr. Dennet then called attention to the specimen of rails, sleepers, plates, and a new fish-joint, all of which were the invention of Mr. Jowett, and he pointed out the advantages of this "rail" and mode of setting as obviating two or three difficulties in railway traveling. The ordinary rail was from five to seven inches in height, and being fixed in iron chairs on the top of the sleepers, there was a vibratory motion, which gave that zigzag movement so unpleasantly experienced by railway travelers. In the model before the meeting the rail was set in a groove to half its depth of the sleeper; there was a slot or hole

cut in the rail, through which a wrought iron wedge or plate was inserted eight or nine inches in length by four or five inches in width and one inch thick, which plate was fastened to the sleepers by bolts or spikes. By this plan there was not only a saving of wear and tear of the rail but an economy in first cost. It could be adapted to rails of any material and of any shape. It could be applied to a light but serviceable rail, it dispensed with the wooden keys and chairs and lessened the number of sleepers by two in the length of rail. The saving in the cost of laying rails was equal to £300 per mile. In India it would be found that the economy of this plan was equal to £400 per mile, or £40,000 in 100 miles, while in this country the saving would be about £28,000 in the same length of line. Mr. Dennet added that this plan had been tested during seven months on a short length of the South-Western Railway, where it could be seen by those interested in the subject. Mr. Dennet also exhibited a form of fish joint which he considered novel, and highly advantageous and practical.

Mr. Zerah Colburn, on being appealed to by the Chairman, said his observations had been confined mostly to lines in America, and as far as his experience went, it bore out the soundness of the principles brought forward by Mr. Adams. The American lines were, for the most part, imperfectly constructed, partly from the inferior quality of the earthwork and want of ballast, and to a great extent from the bad form of rail—the common contractors rail, with a flat foot, but of bad shape and bad quality of iron. Mr. Colburn explained the form of rail generally used, showing how the contractors form of rail, which could readily be fished, had, owing to the bad quality of the iron, in order to gain strength been altered into a form which did not admit of fishing. Nevertheless it was the fact that American carriages traveled over these lines as smartly as first carriages on the superior lines of this country. This he thought was mainly due to the use of the bogy, the great length of the carriages, and the manner in which they are hung. The bogy had the advantage of going round curves easily, and the mode of attaching the carriages to it distributed the weight more uniformly; if they met with an obstruction the shock was not imparted to the carriage. The arrangement for allowing the carriage to swing freely on the body of the bogy, as adopted in America, had been introduced on the Metropolitan Railway, where it would be noticed that the carriages have a peculiarly easy motion. Mr. Adams had spoken of the bogy as having been originally invented in America, but he believed it was first introdnced by Mr. Chapman, of Newcastle, in the year 1812, and was first used there It was taken up in America at an early period, and had continued in general use ever since. It was the opinion of some locomotive engineers in this country that the use of the bogy to engines and tenders was not so safe as placing the wheels in the ordinary manner. He thought that was a mistaken opinion. He had designed some rolling stock for one of the Brazilian lines, and in opposition to his advice the bogy was dispensed with; but experience in the working of heavy gradients and sharp curves led to the ultimate adoption of the bogy. With regard to elastic wheels, something on the principle described by Mr. Adams had been used with success in the States of America, but not of the form which that gentleman had described.

Mr. Dennet inquired whether Mr. Colburn could give any information as to the description of wheel in use on the Massachusetts line, which he had been informed had resulted in great economy of wear and tear.

Mr. Colburn was not acquainted with the kind of wheel used on the line mentioned. He apprehended it would be something similar to those on the South-Eastern line in this country, viz: segments of wood put together. He would, however, add that one objection to the bogy was the necessity it entailed of using wheels of small diameter. A larger diameter than three feet was never used. As a rule the carriage wheels were 2 ft. 9 ins., and the engine wheels 2 ft. 6 ins., and for goods engines only 22 inches. The plan of Mr. Adams enabled a much larger wheel to be used, and this was, in his opinion, a decided advantage.

The Chairman said there was no doubt Mr. Adams had introduced a very important subject for discussion that evening, advocating, as he did, a radical change in the construction of our railways and the rolling stock. On the first introduction of railways he had no doubt it was in the recollection of many that a very rigid road was made. In the first instance the rails were laid on chairs fixed into stone blocks, and one line, he believed in the north of England, they actually built brick walls, on which they laid the rails. All those arrangements caused the rails to be knocked to pieces very soon, and engineers then resorted to wooden sleepers laid upon ballast. The Great Western Railway was, in the first instance, constructed by Mr. Brunel by laying longitudinal sleepers on piles driven a considerable depth in the ground, but at the points where these piles supported the longitudinal bearings great injury resulted. These piles were consequently all removed The system was changed, and the sleepers were laid simply upon the ballast. This, therefore, appeared to be the great object at which railway engineers were aiming in order to avoid or mitigate the shocks produced by railway trains. He therefore thought no one would be disposed to object to a trial of the plan proposed by Mr. Adams. To him (the chairman) it seemed a most reasonable plan; but, of course, in railway experience it would not be prudent to express any very decided opinion upon a new principle of construction until it had been tried for a considerable time. The arrangement which Mr. Adams proposed for making the tires revolve on the wheels was certainly new. It had been tried, and was a great advantage. It had long been sought by railway engineers to make the wheels revolve upon the axles. The principle of Mr. Adams was very much to the same effect. It made the periphery of the wheel the point at which the revolution took place instead of on an axle. With respect to the fish-joint which Mr. Dennet had claimed for Mr. Jowett, he believed there were a great many persons who laid claim to its invention. He knew that Mr. Adams put in claims for that many years ago, and he knew many others who also laid claim to a mode of fishing rails. He had not doubt that by Mr. Jowett's plan a certain amount of elasticity would be obtained, but Mr. Dennet had not stated whether the sleepers themselves would not be weakened by that arrangement.

Mr. Dennet replied—Not at all; quite the reverse. He would add that he did not claim for Mr. Jowett the invention of the fish-joint, but that particular form of fish-joint to which he had referred. It was different from that of Mr. Adams's, the ingenuity of which he did not wish to detract from.

The Chairman said he remembered a system of fixing the rails into timber as long as twelve years ago—not exactly like that shown to-night, but very similar to it, which was tried on the South-Eastern line near London bridge.

Mr. Dennet said that Jowett's plan of fixing the rail in the wood was different from that alluded to by the Chairman, and was quite new. In the plan referred to by the Chairman the metal was embodied in the wood.

The Chairman then proceeded to say that these various proposals of Mr. Adams undoubtedly tended to diminish a very great amount of the friction which took place in railway trains; and any diminution of those forces would practically be a diminution of the cost of working and an increase of dividends to the shareholders; and he trusted it would eventually lead to a diminution of the farces charged to the public. In that respect these matters were of greatest public importance, and he was sure the meeting would readily accord their thanks to Mr. Adams for his very able paper.

The vote of thanks having been passed,

Mr. Adams said he took no credit to himself for the invention of the fish-joint, for five hundred different people, setting down to patch a rail as he did in the first instance, would probably have come to the same conclusion, only he happened to be the first to place such an invention on record. He never considered the fish as used was good, and he set himself to devise what he thought was a good fish on the plan he had laid before them. With regard to wheels, he did not enter into the question of which was the best structure, but merely alluded to the disk wheel as a form to which he wished the elastic tires to be applied; but the spring tire was applicable to all kinds of wheels, whether on common roads or on rails, and the section on the wall showed a mode of applying spring tires to road locomotives. The subject was too extensive to be dealt with in one paper, and he would deal with other branches in the paper which was to follow. He wished, however, to impress upon the meeting that it was perfectly practicable to make engines to go round curves of a radius of 1½ chain, and he claimed a plan of distributing the weight upon all the wheels of an engine instead of principally upon the driving wheels. As to the mode of fixing the rails in the sleepers, there had been several plans proposed of cutting the sleepers, but they were all open to the objection that by cutting into the material of its sleepers its strength was impaired If a sleeper with the ordinary chair required five inches in depth, then when it was cut away to the depth of three inches, it ought to be eight inches in depth in order to make up for the part cut away.

---

☞The amount of the annual tonnage and what was received from it by the New York Central for the past ten years has been as follows:

| | | |
|---|---|---|
| 1855 | 670,073 | $3,189,602 90 |
| 1856 | 776,112 | 4,328,041 36 |
| 1857 | 838,791 | 4,559,275 88 |
| 1858 | 764,407 | 3,700,270 44 |
| 1859 | 834 318 | 3,387,148 36 |
| 1860 | 1,028,183 | 4,095,933 53 |
| 1861 | 1,167,302 | 4,664,448 92 |
| 1862 | 1.387,433 | 6,607,330 96 |
| 1863 | 1,499,604 | 7,498,508 95 |
| 1864 | 1,557,148 | 8,543,370 55 |
| Average tonnage per year before the war | | 866,598 00 |
| Average tonnage per year since the war | | 1,464,728 00 |
| Average amount received per year before the war | | 3,982,103 05 |
| Average amount received per year since the war | | 7,549,736 82 |

## VETO OF THE BILL OF THE "METROPOLITAN RAILROAD COMPANY."

"Neither can I approve the 'act to authorize the Metropolitan Railroad Company of the city of New York to construct a tunnel under Broadway, and for other purposes.' This bill appears to have been elaborately drawn, and seems to have provided against any improper infringement of private rights. I am inclined to think that the structure contemplated, or something occupying the same prominent route from the font of Broadway to the upper part of the city, may be made practicable and may be deemed necessary. Rapid access to and from the business center of New York is of vital importance, and it is not improbable that some more systematic, direct, and well-guarded measure will finally be inaugurated. My objections to this bill are, that although a specified route is laid down, there is no requirement that the road thus authorized shall be speedily completed. There being no obligation that it shall be constructed with reasonable rapidity (the general railroad act allowing five years for the construction of the road from the date of its commencement), it might be possible that through financial disasters or other causes the central thoroughfare of our commercial metropolis would be obstructed or unsettled for a vexatious period. Even should the work be vigorously prosecuted, Broadway must be rendered, at intervals, and for short distances, for a short time, unpleasant and uncomfortable to travel and business, and it seems to me, therefore, that the Legislature should have provided against the contingency of prolonging the inconvenience through the financial vissitudes to which such enterprises are too often subjected But a controlling objection to the approval of this bill is found in section four, which authorizes the transfer of State and City property for the use of this company. It reads as follows:—'The Mayor, Aldermen and Commonalty of the City of New York are hereby authorized to permit the use, by said Metropolitan Railway Company, of such portion of any lands heretofore granted by the people of the State of New York to the said Mayor, Aldermen and Commonalty, or of such other public lands or places in the said city as they may deem proper to allow the said company to occupy either temporarily or permanently for the public convenience in the construction, operation and use of the said railroad and tunnel, and upon such terms, and under such regulations, as may be prescribed by the said Mayor, Aldermen and Commonalty.' By the provisions of that portion of the section cited, it will be perceived that the whole of the Battery, if so much shall be deemed necessary, which is, in one sense, the property of the State may be converted into a passenger and freight depot. The same use might be made of the other public parks and places of the city along or near the contemplated route. I can see grave objections to such a diversion of the parks or public grounds which are designed for the benefit of the people, and which are essential to their health and conducive to their pleasure. I can not consent, on my part, to such use of these grounds without feeling that I had violated the trust reposed in me by the people."—*Governor Fenton.*

The view we have from time to time given respecting the process of making a tunnel railway under Broadway naturally led us to anticipate objections, on the part of the public authorities, to the open-cutting process, on account of the inconvenience to the public of having the street one-third closed, though only for a block at a time, during the construction in the lower part of the city. We therefore are not surprised by this veto; yet we think the plan is the least objectionable of all the plans yet proposed to carry passengers to the upper part of the city.

The Governor intimates that an amended plan may be approved. As we are theorists, and not under the restraints of practicians, we do not hesitate to propose an amended plan; which, we anticipate, will be objected to on account of cost, and on account of its excluding the income that might come from the use of the tunnel at night, to pass the freight trains of the great railways. Our readers will excuse us if we do not notify them in every case when we repeat ideas that we have advanced in previous articles.

The foundation of our plan is to *drive* a tunnel on nearly a dead level, so low as to under-run all the pipes and sewers; excepting at Canal street, where the sewer must be made to dip under the tunnels, by an inverted cast-iron siphon, with proper apparatus to flush it. We do not now moot the question of a new system of gradients, which should come up as soon as we have a government in which engineering and sanitary science are represented; but we assume that the present cacocracy is to continue for generations; and adapt our plan to the present grades of streets, sewers, pipes, cellars, and other structures.

From the Battery to Canal street we propose a dead level, the rails to be at high-water level. This gives but twelve feet hight for the tunnel at Canal street, even if we put only a thin cast-iron roof to it at that point. This hight is sufficient for the cars to get under; but of course the hight should be sixteen feet as soon as the low land is passed. It is, however, reasonable to expect that property-owners in that region would consent to an elevation of the street level, and perhaps help to pay for it, even if the usual proceedings relative to street improvements were not resorted to. And whenever, if not at the time of first construction, this low land is elevated, the roof of the tunnel can be raised.

From Canal to Thirty-third street there should be an ascent of sixteen feet—about eight feet per mile. And beyond that, whatever rate of ascent is suitable for the extension of the line beyond the terminus at the Central Park, as laid down in the plan submitted to the Legislature.

The great depth to be descended at the stations, if nothing but stairs were provided, would be a serious objection to this plan. But we anticipate that there is to be steam machinery at every station; and that hoists will be used, and passengers will be saved the fatigue of ascending and descending by stairs, as proposed by the company. This would make the line more agreeable, and add somewhat to its income; and probably the hoisting machinery would be paid for by the increase of income due to its own influence; but if not, we hold that the profit of the company is not all we have to look out for.

One advantage of a deep tunnel is, that its curves may be very gentle, so that swiveling-truck cars will not be needed. These cars are not easy of traction; and must have their floors higher above the rails than is necessary for cars with square set axles; and are heavier and more complex; and can not be stopped and started with such facility as cars with two or three square set axles.

We propose to continue the use of the tunnel to the cars made specially for it; so that we may make better rails than those in use above ground. We are to have the tunnel entirely free from crossings of common roads, and from obstructions of any kind; therefore we may dispense with flanges on the wheels, and use horizontal wheels to keep the carrying wheels on the rails. The rails then may be made plane on the top, and five inches wide, and the wheels may be truly cylindrical; and thus we may get at least five times more bearing surface than is now got for railway wheels. This liberal extent of bearing will vastly increase the durability of rails and wheels, and may in a measure realize the idea of the railway men of 1830, that the duration of rails would be secular, so that no provision need be made for their renewal. The egregious failure of this anticipaaion is due partly to the increased weight on the wheels, which crushes the rails, and abrades them when the wheels slide, as they must do more or less when they run on different diameters of their coned or worn rims. But *all* of this sliding may be avoided if we keep the track by means of horizontal wheels; for we may then have one wheel loose on its axle, and so leave no constraint for either wheel to slip.

The foundations on which the rails are laid, being housed, and protected from much variation of temperature, will remain firm: and the rails, being subject to no expansion or contraction that is not entirely within the limits of their elasticity, may be made continuous. And they should be planed after they are laid; and made as true as the ways of a planing-machine on the top, and on the sides that the guide-wheels roll against.

Such a track (with whatever improvements may be worked out) is the least that a great and flourishing city ought to tolerate. The cost of it is a matter that would not hinder it; put a magnificent and beautiful plan before the liberal portion of the wealthy men of New York, and they will take the stock, whatever the risk of losing be. We believe it is for the want of such an element of munificence in the scheme that it has twice failed.—*Artisan.*

---

Lancaster Branch of the Columbia and Reading Railroad.—Through the superior enterprise of the Columbia business men, the people of that enterprising little town are indebted for a railroad running through to Reading, leaving our city out in the cold. But it seems that, in their large-hearted generosity, we are to be indebted for a branch road from this city to Litiz, making connections with the Columbia and Reading Railroad there. We see that the preliminary steps are being taken by the presentation of a petition from W. G. Case, Esq., President of the Reading and Columbia Railroad, to the City Councils, on Tuesday evening last, stating that a charter had been granted by the Legislature for the construction of a branch of that road from Litiz to Lancaster, and asking that permission be given to cross Walnut, Prince, Water, Lemon, James and Mulberry streets, in like manner as those streets are now crossed by the Pennsylvania R. R. Co. The permission was granted, with the understanding, which is provided in the charter of the proposed road, that the streets be left in good repair. The road will strike the city on the west side of North Queen, opposite the passenger depot of the Pennsylvania Railroad Company, extending thence along the north and east side of the Pennsylvania Railroad, and running parallel therewith to the intersection of said road with the Harrisburg turnpike road; from that point the proposed branch road will take a north or north-easterly direction.—*Lancaster Inquirer.*

---

Nova Scotia Railway.—We learn from the Halifax *Colonist* that the Nova Scotia Government have secured the passage through their Legislature of an act to authorize the extention of the trunk line of railway from Truro to the New Brunswick frontier, and of the branch line from Windsor to Annapolis The former is provided for by a subsidy of 4 per cent. for twenty years on a capital of £10,600 per mile, and the latter of 4 per cent. on a capital of £6,000 per mile for the same period. The trunk line will, on the terms proposed, cost the Province £30,000 per annum for 20 years, and the 85 miles to Annapolis will cost £23,600 a year for the same period. Embraced in the scheme is provision for bridging the Avon River.

---

☞ The N. O. *True Delta* says that the New Orleans and Jackson Railway will soon be opened to the public. Capt. E. A Morse is rapidly repairing the destroyed bridges at Manchac, the South Pass Bridge, 1,200 feet long, being already completed; and the one at the North Pass, 600 feet in length, will be finished in a few days. There are also about two miles of trestle work to be constructed, but after this is completed there will be nothing to do but repair the track on solid ground, which will be very rapidly done. We may expect within a week or ten days to hear that the road is in running order at least to Jackson.

## ADVANCE OF THE RAILROAD TO THE PACIFIC.

The excitement of the war and the startling events which mark its close have almost entirely withdrawn attention from the progress of the great enterprise which is to unite the Atlantic and the Pacific in iron bands. The work on the eastern division, commencing at Omaha, Nebraska, and striking due west for the passes of the Rocky mountains, is so far advanced that 100 miles of the road will be in running order in December next. The progress of the work, and the manner in which its embaraassments are overcome, are summarily described in the *Omaha Republican :*

The heavy work on the first division of 100 miles is all confined to the first section, between Omaha and Elkhorn River, a distance (by the line of the road) of about 26 miles. Commencing at the Missouri River, at the foot of Farnham street, the first five miles of graduation is now nearly completed. It will be ready for the iron during the present month. This portion of the work is by far the heaviest on the first division of the road. By the first of July, the grade will be completed to a point 18 miles west of this city, and the remaining 8 miles (to the Elkhorn River) will be finished by the first day of August. From the Elkhorn River to Fremont, (37 miles west of Omaha,) much of the graduation is already completed. Between the Elkhorn and the Loup Fork of the Platte River, at Columbus, nearly 100 miles distant from Omaha by the line of the road, the work is very light. Two hundred men, with the aid of the patent excavators employed by the company on the work in the Platte Valley, will finish up at least one mile of grade per day from Fremont to Columbus. September and October will afford ample time to complete the graduation of the road to Loup Fork.

Between Omaha and Columbus there will be but three bridges—one over the Little Papillion, the second over the Big Papillion, and the third over the Elkhorn River. Howe trusses for these bridges are already completed at Chicago, and will be shipped to this point by rail and river in a few days. The masonry is under contract and progressing rapidly, and will be finished by the time the grade is completed to the respective streams.

About 40,000 hard-wood cross-ties have already been prepared, and will be delivered at Omaha before the first of June, at which time it is proposed to commence laying the track.

For the purpose of supplying additional ties as the track laying progresses, the company have provided themselves with four steam saw-mills. One of these has been in operation in Washington County (14 miles north of this city) for nearly twelve months, and it is at this mill that 40,000 ties above mentioned have been prepared. The machinery for the second mill is lying at our landing. Logs for this mill will be rafted down the Missouri River from the heavily timbered districts north of the city.

Two other saw-mills have been shipped from the East, and are expected to arrive within the next ten days.

Hard-wood timber being scarce in this portion of Nebraska, the company have determined to use cotton-wood for cross-ties until they reach the western portion of the Territory, where red cedar can be obtained in sufficient quantities. For the purpose of rendering these cotton-wood ties as durable as oak, (and that this can be done has long since been attested,) the company have determined to resort to the process of Burnetizing. This process is similar to that employed for many years to prevent rotting of wood, and known as kyanizing. It is simply the expelling of the sap from the wood, by immersing it in a chemical preparation which enters the pores of the wood, and protects it against either dry or wet rot—at the same time rendering it pactially fire-proof, and as durable as the best oak or other hard wood.

The machinery employed in the Burnetizing process is an iron cylinder, one hundred feet long—diameter of bore, five feet and one inch. One of these immense cylinders, weighing fifty-five tons, was brought to this city on Monday, on the steamer Sioux City, from St. Louis, and is now at the landing. It will be placed in position for business with two or three weeks. Ties enough for half a mile of iron can be prepared for use every twenty four hours.

A contract for the delivery of one million of brick by the first day of July next was made by the company a short time ago. The buildings to be erected during the present summer and fall will require very nearly, if not quite, two million of brick ; but there will be no difficulty in procuring all that may be needed.

About six hundred laborers are employed upon the graduation, and the work of constructing the road is being pushed forward, in every department, with commendable energy.

Three locomotives will arrive from the East by the first of June, and the iron has been purchased (for the first 100 miles) in Pennsylvania, and will begin to arrive within the next three weeks.

We confidently expect that the first division of the road will be completed (to the Loup Fork at Columbus (by the first day of December. Such is the purpose of those who have the great work in charge, and they are certainly no physical obstacles in the way of its accomplishment. The same energy which is now exhibited in the prosecution of the work will complete it as far west as Fort Kearney by the first of December of next year.

With the building of this great national thoroughfare no longer doubtful, the rapid growth and prosperity of Omaha are fully assured. Situated as it is, at the initial point of eastern terminus of the greatest railroad in the world—on the western bank of the first navigable stream which is reached in passing from the Pacific coast to the Atlantic, and nearly equidistant between the two oceans—600 miles from any important commercial city—with a rapidly improving mining country west of us, dependent for its supplies upon the most accessible point on the Missouri River, from which these supplies can be obtained most readily and cheaply—who can doubt that we shall, with the completion of the first division of this highway of commerce, enter upon a business which will increase, as the line extends westward, into a trade which is destined to render our city the chief commercial emporium of the Missouri Valley?

---

Albany and Susquehanna R. R.—The work of tunnelling the hill in Colesville has now been steadly progressing for more than a year, and the distance to which it is carried at this time is between 600 and 700 feet. The whole length of the tunnel is about 2,000 feet, so that a little less than one-third of the distance has been opened. If labor shall become sufficiently cheap by next autumn, work in other places in this county will be commenced. As to the other end of the road, hopes are entertained of pushing it to Oneonta this year.—*Binghamton Republican.*

## SPECIE PAYMENTS.

The first step toward specie payments is a reduction in the volume of greenbacks in circulation, or an increase in their intrinsic value. Various measures are suggested to effect that object. The bank commissioners of the State of Connecticut have allowed a substitution of legal tenders for specie by the banks, and say that they regard it as a compliance with the laws. The *Argus*, published at Albany, suggests a measure somewhat similar, and alludes to the manner in which the currency is maintained in England.

In that country the gold is deposited in the Bank of England, in London, while the notes of the bank, representing the gold, circulate about the Kingdom. These notes are legal tender everywhere out of London, and bankers and individuals keep them on hand to redeem their obligations, where they formerly kept gold. It is recommended that the present legal-tender issue should be converted into precisely such a system. It is urged in favor of it, that with the gold deposited in New York, the commercial metropolis, and the government notes representing it circulating all over the country, there would be no need of the use of gold in all the intenal commerce. Banks and bankers, and all who of old held gold, would hold the legal-tender notes instead. There would be a papor currency, which would be at par, wherever in this country it might be found, as Bank of England notes are at par in every part of England. It is also added that the internal exchanges would be reduced to the lowest possible rates; for if at any time the state of exchange required the actual transfer of money from one point to another, the legal tender notes could, obviously, be sent by express at a much less cost than gold could be transmitted.

It is further urged that, as the banks circulate their notes, and keep them at par in their several localities, without having dollar for dollar in gold in their vaults, the Government can do the same. The banks have sustained a circulation of $300,000,000, heretofore, with only $80,000,000 of gold in hand. Throwing out the interest bearing legal-tenders, the Government issue remains at $450,000,000.

It is estimated that this amount could be kept at par, with a deposit of one-third of the amount in gold, perhaps with less. The credit of the Government notes representing the entire capital of the country must be better than the credit of bank-notes representing little detached portions of that capital. Besides, the gold held by the banks is liable for other debts than their circulation, as their deposits. The gold held in the Government depository would be liable only for the legal-tender circulation. The Government, therefore, could sustain its circulation at par with gold, on as low a deposit of gold as the bank sustained theirs. It would be safe for the Government to count on the legal-tenders going to par, by the time $150,000,000 had accumulated. It might then stop the accumulation, and offer to redeem the legal-tender notes, leaving them still to be legal-tender, like the Bank of Englaud notes, everywhere, except at the depository. The result of this system in practice in England is, that Bank of England notes represent about one-half public credit, and one half gold coin. Here the paper would represent two-thirds Government credit and one-third gold coin. The more extensive territory for circulation, and the use of small notes, would sustain the Government issues as well as one-third of coin as the English notes are sustained on one-half.

The profits on the circulation of the excess of notes over the coin would go to the Government—that is, to the whole community, as the profits on bank circulation now go to only a small part of the community who are the bank stockholders.

In the same quarter, a tax on cotton by the Government of ten cents a pound is suggested. This would not make the price abroad over thirty cents, thus allowing ten cents to the grower, ten cents to the Government, and ten cents for the charges and profits of commerce. The war has proved that thirty cents a pound for American cotton will be gladly paid in the markets of the world. It was suggested in the *Evening Post* some time since, that the Government should give up all its dealings in cotton, and proclaim all cotton exempt from confiscation upon payment of ten cents a pound in gold. This would render a special tax unnecessary, and perhaps out of the cotton now in the South $100,000,000 could be obtained, which if applied to the purpose might at once put the legal tenders at par.—*Stockholder.*

## MR. CHADWICK ON RAILWAY REFORM.

Mr. Edwin Chadwick, who is well known for his labors as Secretary of the Health of Towns Commission, and as a promoter of reforms in the means of popular education in England, has of late turned his attention to railway management; and, as president of the department of economy and trade in the Association for the Promotion of Social Science, has delivered an address upon this subject; which address has attracted much attention, and been followed by the appointment of a Parliamentary commission.

By an act of Parliament in 1844, it is provided that, in 21 years from the year then following, the Government may exercise a power of resuming the public rights, and asserting governmental duties, in respect to a large portion of the railways, by purchasing them. This renders it expedient that there should be an early examination of the subject, with a view to prevent errors of legislation in future, as well as to retrieve, as far as may be, what eminent railway authorities declare to be errors of the past.

Mr. Chadwick considers that railway communication is as yet only partially developed in Great Britain. The further development of it in crowded urban districts is of sanitary importance, to prevent and reduce the overcrowding of populations by spreading them over larger areas. If London, which has seven people to a house, had twenty, as Paris has, the sickness and death rates would be much higher, as in Paris. The chief hope of obtaining improved habitation must be in new suburbs, to be made accessible by the cheapest as well as the quickest communications. For new suburban sites branch railways, and in some places horse-tramways, will be required. The development of mineral produce will also require branch lines, and lower rates of freight, to meet the competition developed by the special facilities enjoyed on several continental lines. Agriculture also is but partially developed; and steam or horse railways are much needed by it. These important means of relief and development are cramped by enormous legal expenses caused by the opposition of old companies, who apprehend that such short lines may compete with their traffic. And undoubtly the existing railway property is liable to depreciation from the open condition of future competition on which they took their privileges; but with all their interest in Parliament, it is impossible to suppose that they will be allowed to convert those privileges into strict monopolies for their own protection, to the injury of the national growth. Moreover, engineers affirm that new lines may be constructed for a third of the cost of the old lines; and they may be worked more economically, with better carriages, at a third greater speed.

Some time ago Mr. Chadwick brought the subject before a committee of the House of Commons, to which he submitted the expediency of adopting the principles of the Code Napoleon—responsibility for accidents. The principle was only partially adopted; but experience has shown that it would be better if fully adopted. At the outset of railway communications, Mr. Chadwick, and other public officers, objected to giving up to irresponsible private speculators the public highways and means of communication for their private enterprise and profit; and urged that Government should determine the lines, and provide the capital, and put them up for competition, to construct, maintain, and work them responsibly. This course has been taken to a great extent in Belgium, Wurtemburg, France, Switzerland, and other continental states.

The comparative results are as follows:—In England net dividends are under 4 per cent. even now; and the shareholders could have gained largely if they had kept their money in Government securities. In Belgium the net dividends are 5½ per cent.; in France, over 6½; in Prussia, nearly 7½, with fuel and iron much dearer. As to the public gain: In England the fares per 100 miles are, for first class, 15s. 10d.; second class, 11s. 6d.; third-class, 7s. 6d. In Belgium they are, for first-class, 6s. 6d.; second-class, 5s. 6d.; third-class, 3s. In France they are 13s. 6d., 10s. and 7s., respectfully; and in the German States somewhat lower. But their third-class carriages are as good as the English second-class; and their second as good as the English first-class. And as to safety, it is seven times greater in France; nine times in Belgium; and sixteen times greater in Prussia, than it is in England. The speed is greater in England, where only the people realize that time is money; but increase of speed does not much effect the cost; indeed it is said that the wear of slow trains, with frequent stops, is greatest; and of the English railway accidents more than nine-tenths have arisen from want of discipline, insufficient regulations, and parsimony of direction.

Mr. Chadwick lays down, as a sound economical principle, that there should be no tax on intercommunication. The fact of a railway, private or public, yielding profit by a toll, or even paying its costs by a toll, is as fallacious a test of its value as would be a toll on a road or by-way. It has been shown that the increased value given to land by railways would have paid for their construction. The Waterloo Bridge was a total loss to its proprietors; but the assessors found that the increase of rents in the streets near it would have paid for it. This principle is applicable to the new lines contemplated; it is politic that there should be no taxes, tolls, or anything to increase the cost of carrying.

It has been shown in many cases that the profits of companies were increased by greatly reducing fares; yet companies generally keep up fares, and take advantage of necessities; and the consequence is that people live near their work, and do not pay fares except in cases of necessity. This is denounced as one of the great evils of a monopoly of the highways by men who study only their own profit. But if a government owns the highways and means of travel, it encourages travel by low fares, because it thereby increases the value of property, and hence gets more taxes; and it preserves the health of the people, who earn and consume more taxed commodities, and are less burdensome to the parishes.

Mr. Chadwick develops a bold scheme to put the railways under Government control; to stop competition *in* the field, and open competition *for* the field. Something of this kind has been proposed in New York; a million was offered for the Broadway Railroad franchise; the fares to be limited, and other conditions to be made. We shall review the scheme in a future article.—*American Artisan.*

## NEW JERSEY FINANCES.

This State has no debt except what is known as the War Fund Debt. In 1864 the whole of her domestic debt, arising from the expenses of the State Government, was paid, and a cash balance remained in the Treasury of $139,273 at the end of the year.

| | | |
|---|---|---|
| The receipts of the war fund in the last fiscal year, including the balance on hand at the beginning of the year, was.... | $1,765,608 | 74 |
| Disbursements..... | 1,733,037 | 92 |
| Balance Nov. 30th, 1864 ..... | $42,570 | 82 |
| During the year there were issued state bonds for the payment of..... | $961,500 | 00 |
| Yielding a premium of..... | 50,428 | 87 |
| Proceeds of bonds sold, 1864. | $1,011,928 | 87 |
| The whole number of bonds issued since the commencement of the war to November 30th, 1864, amounts to..... | $2,599,600 | 00 |
| Due from war fund to banks for loans, November 30th, 1864... | 175,000 | 00 |
| Liabilities of war fund, Nov. 30th, 1864..... | $2,774,600 | 00 |

The balance claimed as due from the United States on November 30th, 1864, was $940,037 10, of which $131,012 was subsequently passed to the credit of the State. The balance, in favor of the sinking fund, after deducting interest due on July, 1865 was $323,958.

On January 1st, 1866, bonds amounting to $98,600, together with interest on all bonds then outstanding, are to be paid. To meet the payment, the Governor recommended, at the last session of the Legislature, the passage of an act to raise by tax the same amount as on the previous year, to be paid to the sinking fund commissioners toward the liquidation of the war debt as it falls due. No part of the money raised by tax is needed for State purposes.

To meet the expenses of the State for the payment of families of volunteers, and other claims incident to the war, during the present year—estimated, in January, to amount to a million of dollars—the Governor recommended that a loan to that amount, for war purposes, be authorized. These are probably the bonds now appearing in this market. David Narr, of Trenton, is the State Treasurer.

## ANNUAL MEETING OF THE STOCKHOLDERS OF THE NEW JERSEY RAILROAD AND TRANSPORTATION COMPANY.

The annual election of directors for the New Jersey Railroad and Transportation Company took place Wednesday, June 7, at eleven A. M., at the office of the corporation, in Jersey City. The stockholders were well represented, and the proceedings characterized by the utmost harmony and good feeling. The first business transacted was that of organization, which resulted in the selection of Hon Joseph D. Randolph as chairman, Messrs. John P. Moore, of New York, and Wm. Edgar, of Rahway, vice presidents, and Messrs. H. J. Southmayd, of Jersey City, and W. D. Chetwood, of Elizabeth, secretaries.

The report of the directors, for 1864, was then read by Mr. Southmayd. It was accepted.

This was followed by the reading of the report of the directors for the last year also, by Mr. Jackson. From this document we learn that the capital stock of the company remains the same as for the previous year: the funded debt was reduced $7,500, and a floating debt of $145,000 was incurred. An additional track from New Brunswick to the junction with the Camden and Amboy Railroad, a distance of three and one-third miles, has been laid, completing the double track over the road, and bridges for the whole length of the line, except at the Passaic bridge crossing in Newark. New car shops have been erected at Jersey City to replace those destroyed by fire at East Newark. An engine house, capable of containing twenty-four engines, has also been erected at Jersey City. Nine first-class locomotives have been purchased and added to the equipment, and eighteen superior passenger cars ordered, of which twelve were contracted for with builders in Jersey City and Philadelphia, and six to be built in the company's shop. It is contemplated to build a fireproof bridge over the Raritan river at New Brunswick, and to make other permanent improvement on the line of the road. These expenditures have consumed the net proceeds of the road and $145,000 added, which constitutes the floating debt. To provide for contingencies the capital stock has been increased to $6,000,000. For this purpose, and for the payment of the floating debt, bonds of the company bearing six per cent. interest have been issued, having ten years to run.

The receipts of the road show an increase over those of 1863, as follows:

| | |
|---|---|
| From passengers | $240,164 52 |
| From freight | 52,683 21 |
| And a decrease from miscellaneous sources of | 15,841 15 |

The expenditures increased for the same period as follows:

| | |
|---|---|
| Maintenance of road, bridges and buildings | $47,849 02 |
| Repairs of locomotives and cars | 22.277 56 |
| Fuel | 55,889 74 |
| Operating the road and transporting passengers and freight, including office expenses | 68,278 20 |
| Taxes and transit duty | 23,540 11 |

The receipts for past four years from freight being as follows:

| | |
|---|---|
| 1860 | $101,619 20 |
| 1861 | 81,097 31 |
| 1862 | 110,392 94 |
| 1863 | 161,530 86 |
| 1864 | 214,214 07 |

Nearly four million passengers were transpotred last year, making a total of about fifty millions who have passed over the road without loss of life or limb to any in the cars. The attention of travelers should be called to this fact, and they should be impressed with the importunce of obeying the rules of the company in order to insure their own safety. The report was made, by order of the board, by A. L. Dennis, President, and F. Wolcott Jackson, General Superintendent. The stockholders upon motion referred it to the appropriate committee.

The report of the committee appointed to examine the directors' report for 1864 was then read.

The election of directors was the next thing in order. There was very little competition, and the following gentlemen were unanimously election:

*Directors:*—Dudly J. Gregory, Henry R. Remsen, Hamilton Fish, Ambram O. Zabriskie, George R. Chetwood, Ferdinand Suydam, Alfred L. Dennis, Martin A. Howell, Nehomiah Perry.

The workshops were then examined by the stockholders. They afterwards took a sail down the bay upon the ferry-boat Jersey City.

## MODEL ENGINEERING.

Our age is eminently the age of engineering. It was a great feat for Hannibal to cross the Alps with his hardy veterans, and for Bonaparte to do the same 2,000 years latter. The fish ponds, aqueducts and grand old military roads, built by the Romans, are not to be overlooked among the notable things of antiquity; even Semiramis cutting that almost endless turnpike through her dominions, 1,500 miles long, leveling mountains, filling valleys and bridging streams, is not wholly lost amid the darkness that has swallowed up everything else in her day; the pyramids, sphinxes, and huge temple of Egypt, with her tremendous artificial lakes, command our respect; the Chinese wall, fifteen hundred miles long, 30 feet high and fifteen wide, with the multiplied towers of observation, and crossing rivers and lofty mountains, looms up among the real wonders of the world, and the canals of China, hundreds of miles in extent, still in good repair and use, tell us of great men among the Celestials; even the Peruvians, building that splendid post road along the plateau of the Andes, for many hundred miles without the use of iron, and paving its entire extent with smooth stones, calls forth admiration; the erection of the cities of Venice and Mexico upon the waters, and the damming out of the Atlantic of Holland by the Dutch, as well as the building of St. Petersburg in the marshes of the Neva, are monuments of human skill, endurance, persistence and conquest over the rude forces of nature that must challenge the respect of the future generations of men, no matter how exalted the perfection they may reach.

But all these works depended for success upon either the subjection of the laborer to the will of the ruler or designer of them, or some mighty necessity that drove the people, as in Holland, to fight the rudeness of nature till it yielded. In our day it is different. The interest of trade or the convenience of luxury of traffic or travel, awaken in man the design to fit things to move in a more easy groove than nature has arranged, and so mountains must either be cut away or tunneled, rivers spanned with enormous bridges, and rough ways made smooth by the appliances of machinery. Tyranny has nothing to do with these triumphs of knowledge and wondrous skill. The road over the Simplon loses half its value in the recollection that it was dictated by the necessities of military enterprise, but the tunneling of Mount Cenis, now in process of construction, is devoid of any such influence, and meets the eye of the traveler only as a work suggested by the social necessities of the people, as a means of easy exit from France to Italy, and will remain, like the tunnel under the Thames, a monument to the wisdom that designed, and the hand that executed.

This great enterprise, in perforating the Alps, is matched by a similar effort in our own State, in boring a hole through the Hoosac Mountains. Leaving out of view the immense expense of these improvements, how majestic they will look to future generations who will live to enjoy their use. Though they may be so far improved in the art of engineering as to do the same or greater things, with much less labor and much more ease, yet they can rank them, as we do the pyramids and the crossing of the Alps—wonders of the days of their fathers.

Another great advance of the modern over the ancient mechanical wonders is their great beauty of design and finish. Compare the clumsy chariot of the Pharohs with the locomotive or simple car, or even common carriage of our day. Compare any bridge of ancient date with the Suspension, or New London, or the Menai, or Montreal bridges, and how insignificant. And how puny in this line was the old dominant Roman race, in the hands of one Archimedes, an eminent mathematician of Syracuse, and who, if living in our day, would be the greatest builder of railroads and other public improvements in the world. But our engineers have not got through with fixing up the planet. There are jobs yet to be executed in bridging rivers and tunneling mountains that will occupy the talent of the country for a century, and our boys who have a talent that way can not do better than improve it.

And for their encouragement we will add that they are coming on just at the right time. There are questions yet to answer, which solved will immortalize the discoverer of the solution, and that they can be solved is as reasonable as that many obscurities of thirty years since have disappeared. When locomotives were first invented by Stephenson, it was doubted that one could draw a weight greater than itself. The great engineer said "it can," and it was done. "Seeing is believing, sir," and so it always is. Brunel doubted whether a train could travel thirty miles an hour. Stephenson said, "I will show you that it can go twice that rate," and it was done. It was also doubted that a locomotive could climb an ascent with the train attached. Our Whistler solved that when he put the iron steed over the Berkshire hills, on an average ascent of 84 feet to the mile. Immortality followed; and cars now go over the Blue Ridge on an ascent of 116 feet to the mile. But the expense is enormous. Nineteen feet rise double the cost of power.—*Boston Com. Bulletin.*

☞ At the annual meeting of the stockholders of the Mississippi and Missouri Railroad Company, held at Davenport, Iowa, on the 5th inst, the following gentlemen were elected directors for the ensuing year: Gen. John A. Dix, George T. M. Davis, John Elliott, George H. Stanton, jr, Blakely Wilson and David Jones of New York; Hiram Rice, J. B. Grinnell and Ebenezer Cook of Iowa.

## THE MILITARY R. R. SYSTEM.

To conduct the militay operation in Tennessee, Georgia, Mississippi and Alahama, it beeame neeessary for the Government to take possession of the railroads, and repair and operate them. The head-quarters of the system adopted was at Nashville, and the immense establishment is thus described:

There are over two miles and a half of buildings, containing the most improved machinery in the world. During the Atlanta eampaign there were in use nearly 1500 miles of rail, with a rolling stock consisting of 271 locomotives and 3000 cars. Col. John C. Crane ran this establishment, and employed 18,000 men, as mechanics, engineers, blacksmiths, conductors, hrakemen, unskilled lahorers, etc. At that time the expenses incident to the running of the military railroads in the Division of the Mississippi, including the purchase of material and the payments of employes, reached the astonishing sum of $2,200,000 a month. Three-folds of this huge expense has already been curtailed, and over one-half of the men have heen discharged. There is a round-house connected with this establishment, containing sixty stalls, and one hundred locomotives can be accommodated at one time. The water tank is a durable structure, cut out of solid rock, 75 feet long, 25 wide, and 25 deep. The entire job was performed hy colored men. The most prominent huildings are those of the locomotive, machine, ear, and hlacksmiths' departments. Then there are iron and brass foundries; paint, upholstery, and carpenter shops; a fine hospital, and upward of three hhndred lodging-houses. There are also a number of store-houses, and of eight house nearly eight hundred feet in length. The military still have charge of the roads running north, hut it is presumed that they will soon he turned over to the owners.

## GRAND RAPIDS & INDIANA R. R.

The proposed north and south road is designed to cross the Michigan Central at Kalamazoo A large amount has already been expended on the grading of the line, and a Congressional grant of public lands of *six sections* per mile has heen made, from Fort Wayne to Little Traverse Bay, making, in case the sections are all full, 3,840 acres per mile. From the hest information we are able to ohtain, these lands may he stated as more than an average in their natural value. With such a start is it not prohable that reasonahle and judicious efforts would secure the completion of the road? And is it not worthy the hearty and efficient efforts of our citizens?

Other places attach great importance to such enterprises. A meeting was held at Jackson on the 17th inst., when an elahorate report was made hy Hon. C. Pringle, on behalf of a committee of 13 appointed at a former meeting. The report strongly urges upon the people of Jackson the construction of the "Grand River Valley Railway,"—a proposed railroad from Jackson to Grand Rapids. The chief argument for the construction of that road is the trade in *plaster* and *pine timber*, which it will give to Jackson. The length of the line from Jackson to Grand Rapids is from 89 to 92 miles. The report recommending the County of Jackson to loan its credit to a large amount, and that a committee of 13 be appointed to present the proposition to the electors. And after speeches from ex-Gov. Blair, C. W. Pomroy, Amos Root, and others, the report was adopted. Now, if the business, in *plaster*, *pine lumber*, &c., of Grand Rapids, will justify the Jackson people in making a road 90 miles to get to it—would not the same business justify the people of Kalamazoo in making a road 48 miles? And in consideration of the munificent endowment of public lands on this line, is not the inducement strongly enhanced for the construction of this road?

Kalamazoo has the advantage of the Michigan Central, so has Jackson and the Adrian Branch of the Michigan Southern also. But notwithstanding, Jackson has the advantage of two railroads, their enterprise leads her citizens to work and contribute of their means to secure a *third*. What will the interest and enterprise of Kalamazoo lead her citizens to do?

Suppose the Jackson people go a-head and secure their road to Grand Rapids, and the citizens of Kalamazoo take no measure to secure the construction of this road, what will he the husiness effect on the two places? Which will have the advantage? And after Jackson shall have secured the road to Grand Rapids, and Kalomazoo shall have done nothing, and her *north and south* road shall have died for the want of *local aid*. Would it be unreasonahle to conjecture that they would take up the proposed line from Grand Rapids to Traverse Bay and Mackinaw, and make it a continuation of the Jackson road?

There is room for both roads, and each constructed would add largely to husiness interests, and the value of the real estate of the district of country through which it shall he constructed. Should the citizens of Jackson persevere in the course they are now taking, and should the people of Kalamazoo treat the subject with neglect, it requires no great powers of divination to see what the result will he.

This project has a *grant of lands*, which, in a few years after the construction of the road, may he made to pay its entire cost, and give the road to the stockholders free. But this *land grant* is not money, nor can the company have the right to sell the lands until the road shall have been constructed. At first it requires just as *much ready cash* to make the road as if there was not an acre granted to secure it. The grant makes a double security for the money invested, but is not *money*, and hence there is just as loud a call for *local aid* on this as any other railroad project. The money must first he obtained to construct the road, or the lands will never avail anything. The construction of the road secures the lands. And the lands make the investment secure. What will our citizens do about the matter?—*Kalamazoo Gazette.*

Sale of the Prussian State Railway.—We learn that the Prussian Government, following the example of Austria and Italy, contemplate the sale of the state railways of the country, and that proposals will shortly he made on the subject. It is a somewhat curious fact that, while a strong party in England are insisting so strongly on the advantages which would accrue to the public from the state becoming the owners of railways in that country, those continental Governments who have had the most experience of the working of the system of state railways are at present taking steps to free themselves from the responsibilities which they have undertaken, and to follow the course adopted in England of leaving such matters in the hands of private enterprise. In Pennsylvania, the State found it to its interest to depose of its public works to private Companies.—*R. R. Journal.*

## MONETARY AND COMMERCIAL.

But little change has taken place since last week, in either money or produce markets—the demand for money has been moderate and terms have been easy.

Gold has advanced again, and the upward tendency was quite stong for a day or two; this appears; however, to have heen checked.

The dailv changes in the price of gold in New York during the week were as follows:

| | Opening. | Highest. | Lowest. | Closing. |
|---|---|---|---|---|
| June 6 | 136¼ | 137⅜ | 136¼ | 137⅜ |
| " 7 | 137¼ | 137½ | 136⅞ | 137½ |
| " 8 | 137⅜ | 138 | 137¼ | 138 |
| " 9 | 138 | 138 | 137 | 137¼ |
| " 10 | 138 | 138¼ | 137¼ | 137¾ |
| " 12 | 138¼ | 142¼ | 138¼ | 141¼ |

On the 13th it opened at 141¾, advanced to 142½, and closed at 142 at 1½ P. M. The demand for exchange has been fair, and the market has ruled firm at our quotations.

We quote coin and exchange at the close as follows:

QUOTATIONS.

| | Buying. | Selling. |
|---|---|---|
| N. Y. Exchange | par. | 1-10c prem. |
| Philadelphia | par. | 1-10c prem. |
| Boston | par. | 1-10c prem. |
| Baltimore | par. | par. |
| Gold | 41 prem. | 42@43c prem. |
| Silver | 30@31c prem. | 32@33c prem. |
| Vouchers city | 2@3c dis. | |
| Vouchers country | 5@15c dis. | |
| Certificates | ½c dis. | par. |

The following is the statement of the Illinois Central Railroad for May, 1865:

LAND DEPARTMENT.

| | | | |
|---|---|---|---|
| Acres Construction Lands sold | 9,381.07 | for | $99,262 12 |
| Acres Int'st Fund Lands sold | 360 00 | for | 5,634 00 |
| Acres Free Land sold | 1,090 80 | for | 12,439 55 |
| Total sales durrng the month of May 1865 | 10,831.77 | for | $117 336 67 |
| To which add Town Lot sales | | | 3,553 50 |
| Total of all | | | $120,890 17 |
| Cash collected in May | | | $115,339 92 |

TRAFFIC DEPARTMENT.

| | |
|---|---|
| Receipts from Passengers | $166 234 67 |
| Receipts from Freight | 269,991 10 |
| Receipts from Mails | 6 358 33 |
| Receipts from Rent of Road | 4,000 00 |
| Receipts from other sources | 8,000 00 |
| Total receipts in month of May, 1865 | $454 604 10 |
| Total receipts in month of May, 1864 | 406,372 66 |

The following gentlemen were elected directors of the Chicago and Rock Island Railroad for the ensuing year: Thomas C. Durant, Francis H. Tows, David Dows, C. W. Durant, E. W. Dunham, Thomas S. Sturgess, Clark Durant, John F. Tracy, Oliver Charlick, Wm. F. Havemeyer, Wm. Whiteright, jr., John P. Yelverton.

The total imports at New York for the week compare as follows:

| Week ending, June 9. | June 2. | May 26. | May 19. |
|---|---|---|---|
| Dry Goods | $1,213,042 | $815,247 | $897,385 | $650,203 |
| Gen'l merch'se. | 1,457,394 | 3,175,292 | 1,974,880 | 2,853,650 |
| Total | $2 670,486 | $3,560,590 | $2,872,265 | $3,504,853 |

The New York imports of foreign dry goods compare as follows with former returns:

| For the Week. | 1863. | 1864. | 1865. |
|---|---|---|---|
| Entered at the port | $661,942 | $1,131,906 | $1,213,042 |
| Thrown on market | 494,785 | 527,568 | 1,402,164 |
| Since Jan. 1. | | | |
| Entered at the port | $28,170,079 | $43,145,763 | $20,495,869 |
| Thrown on market | 24,521,537 | 43,145,763 | 24,962,638 |

WHAT IS AN INCH OF RAIN?—The last weekly return of the Register General gives the following interesting information in respect to rain-fall: "Rain fell in London to the amount of 0.43 inches, which is equivalent to 43 tons of rain per acre. The rain-fall during last week varied from 30 tons per acre in Edinburgh to 215 tons per acre in Glasgow. An English acre consists of 6,272,640 square inches; and an inch deep of rain on an acre yields 6,272,640 cubic inches of water, which at 277.274 cubic inches to the gallon makes 22,622.5 gallons; and, as a gallon of distilled water weighs 10 pounds, the rain-fall on an acre is 226,225 pounds avoirdupois; but 2,240 pounds are a ton, and consequently and inch deep of rain weighs 100,993 tons, or nearly 101 tons per acre. For every 100th of an inch a ton of water falls per acre." If any agriculturist were to try the experiment of distributing artificially that which Nature so bountifully supplies, he would soon feel inclined to "rest and be thankful."—*London Journal of the Society of Arts.*

DUMMY ENGINES.—The Second Avenue (Horse) Railroad Company have, for some time past, been using three "dummy" engines on their track between Sixty-second street and Harlem. The experiment is understood to be completely successful. The dummy cars can be run at a higher rate of speed, can be stopped more readily, and are roomier than horse cars, while no accidents have so for occurred. We have not heard how they compare in expense, but they certainly should be more economical in the long run than horse cars. In view of their greater speed and roominess, we hope that the day is not far distant when some sort of dummy car will supersede horse drawn vehicles. The slowness and over-crowded state of our city cars has got to be an intolerable public nuisance, which ought to be abated.—*New York World.*


## The Old And Reliable Route.

**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

## MONDAY MORNING, MAY 8,

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING ONE THROUGH TRAIN between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at 8:00 A. M.; arrive 8:40 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my—1

## STEAMSHIP COMPANY.



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | | |
|---|---|---|
| WASHINGTON | 3,204 tuns, | 900 horse-power. |
| LAFAYETTE | 3,204 tuns, | 900 horse-power. |
| EUROPE | 3,254 tuns, | 950 horse power. |
| FRANCE | (afloat), | 900 horse power. |
| NAPOLEON III | (afloat), | 1,400 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its exuivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent.
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co.

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building) | 3,112 | ——— |
| ENGLAND (now building) | 3,430 | ——— |
| SCOTLAND (now building) | 3,430 | ——— |
| ERIN | 3 310 | Grace. |
| HELVETIA | 3.315 | Prowse. |
| PENNSYLVANIA | 2,872 | Grogan. |
| VIRGINIA | 2,872 | Lewis. |
| LOUISIANA | 2,016 | Axplett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to
WILLIAMS & GUION, No. 71 Wall street.
For steerage passage apply to
WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor).—The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN | $90 00 | STEERAGE | $30 00 |
| First Cabin to London | 95 00 | Steerage to London | 34 00 |
| First Cabin to Paris | 105 00 | Steerage to Paris | 40 00 |
| First Cabin to Hamburg | 100 0 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR ..... 2,595 65-95 tuns.,
WISLIAM R. BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge.

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
JAMES A. RAYNOR, No. 10 Barclay street.

## CENTRAL RAILROAD
—OF—
## NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,
Commencing April 24, 1865, leave New-York as follows:

At 6: 0 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, et.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

JOSIAH O. STEARNS, Superintendent.

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:15; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m.; 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:15; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.) 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8.00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

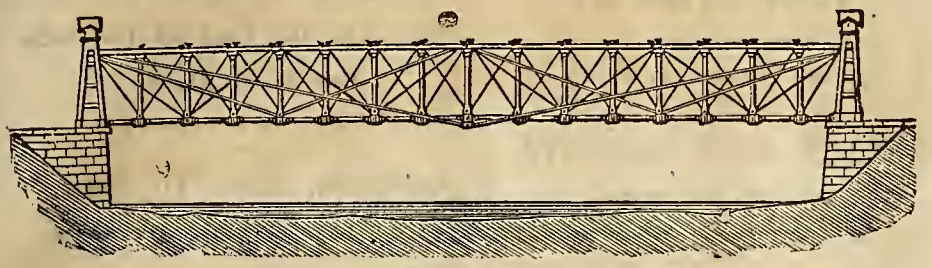
JAMES H. HOYT, Superintendent.

## NEW-YORK AND HARLEM RAILROAD.

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections.

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '63. 1y. Letter Box, 1362. C. J. SCHULTZ, Pittsburgh, Pa.

**HOLENSHADE, MORRIS & CO.**

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27.1y

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

*Philadelphia, Pa.*

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or not of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y 1

**KNOX & SHAIN,**

**Engineering and Telegraphic**

INSTRUMENT MAKERS.

PHILADELPHIA

JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or Without Axles.

**WHEELS FITTED**

To Hammered or Rolled Axles, Manner, at horteste, and on th Most Reas Terms

Manufacturers, Importers & Dealers

—IN—

**RAILROAD, CAR,**

—AND—

**MACHINE SHOP**

**SUPPLIES,**

—AND—

**MACHINERY OF EVERY DESCRIPSION**

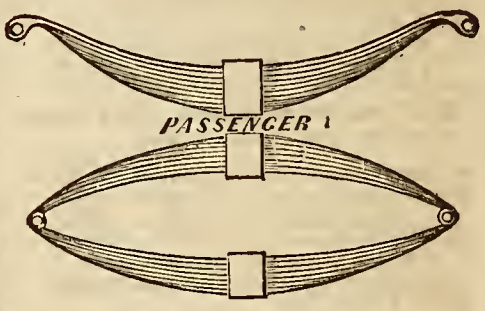
47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

RAILWAY SPRINGS.

**FREIGHT**






**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS.**

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS' & LIVINGSTON,

54 Exchange Place, New York.

**W. M. F. HEWSON,**

## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new runniog stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

**SPEED, SECURITY AND COMFORT,**

Will be more than sustained under the reorganization of ts busioess.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHING-TON CITY.

W P. SMITH, *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent. Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express..... ..... | 6 00 A. M. | 7 30 P. M. |
| Mail and Express..... | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation..... | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation..... | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express ... .....10 | 30 P. M. | 10 05 A. M. |

☞Sle ping Cars by Night Express Train.

T e Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail..... | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo..... ..... | 7 00 A. M. | 9 45 P. M |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation..... | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville..... | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation..... | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Buses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis. Cairo. St. Joseph Jefferson City and all Western Citiei.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail..... | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation..... | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express..... | 8:00 P. M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 42 Fourth street adjoioing the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
Gen eral Ticke Agent.

W J. GRISWOLD nera' Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

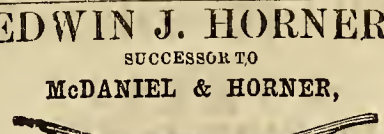
Spt. 2 MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

**Lewistown, Mifflin Co., Penn**

**JOHN A. WRIGHT, Sup't**

This Iron Is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

**THE SCHENECTADY**

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

**Rebuild and Repair Locomotives.**

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches nutside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅛ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1¼ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!

## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East a Wes

WM. TEARNE Supt

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON. - - - } Editors

CINCINNATI:
THURSDAY, JUNE 22, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| *Little Miami—* | *Depart.* | *Arrive.* |
|---|---|---|
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 8:15 A. M |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| *Atlantic & Great Western—* | | |
| | 8:00 A. M. | 8:40 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:45 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond, Chicago and Indianapolis | 7:00 A. M. | 9:45 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 10:20 A. M |
| Richmond and Chicago | 7:00 P. M. | 12:35 P. M. |
| Hamilton Accommodation | 11:00 P. M. | 6:45 A. M. |
| do do | 7:00 A. M. | 8:05 A. M. |
| Dayton Accommodation | 2:20 P. M. | 9:45 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Chicago and St. Louis Express | 7:00 A. M. | 12:00 M. |
| Springfield and St. Joe Express | 1:00 P. M. | 5:00 P. M. |
| St. Louis and Chicago Express | 4:00 P. M. | 2:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 4:50 P. M. | 8:35 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:40 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 6:50 A. M. | 1:00 P M. |
| Seymour Accommodation | 3:45 P. M. | 5:00 A. M. |
| Louisville, St. Louis and, Cairo Express | 8:00 P. M. | 8:00 A. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 7:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 8.00 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:55 A. M. |
| Evening Express | 1:35 P. M. | 6:00 P. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## PENNSYLVANIA RAILROAD.

On our return from New York, we passed over the Pennsylvania Road, and have been able to see and examine something of the condition and management of one of the best and most remarkable railroads in the world. We have already given, in previous notices, an account of its business and financial affairs. When we say that the annual receipts of this road are *thirteen millions of dollars;* and that it is constantly over-crowded with business, the reader can have some idea of its magnitude and importance. A brief reference to its history will show the great improvements and rapid growth of the road. Originally, the only railroad west of Philadelphia was the Philadelphia and Columbia Railroad,—about 70 miles in length. Then the Pennsylvania Central was made, extending from Columbia to Pittsburg. For several years this road passed the Alleghenies by an *inclined plane* to Johnstown. It was believed, in the early period of railroad engineering, that it was impossible to pass the mountains in any other way. That delusion, however, has passed away, and that part of the Pennsylvania Railroad on the mountains is quite as good, and as easy to pass over, as any other. Before we come to this, however, let us see how the present company extended its possession and revenue. The Columbia road was owned by the State. So also was the inclined planes and the connecting canals. In time the railroad company bought all these, including the main lines of canal. The Pennsylvania Company has also leased the Erie Road and made several branches. Thus, step by step, the Pennsylvania Railroad Company have become possessed of the largest amount of railroads and canals, under the control of any company whatever. Its most important operation was that by which it did away with the inclined planes, and established, what had been thought an impossibility, an easy, pleasant, profitable railroad track over the rough summits of the Alleghenies. This was accomplished thus: first, by careful surveys a better route was found, by which the ascents could be made much easier; secondly, places where the ascent could not be made by any common mode were passed by a *winding* process, which seems to the eye both difficult and dangerous; but is neither to the extent which we would at first imagine. There is one place, commonly called the *horse shoe*, where the turns are so abrupt, and the descent so rapid, it seems an impossible feat, but the descent is made with perfect ease. To the eye of the astonished passenger, the train seems to *double itself up*, while the eye, casting its glances on the deep, dark, frowning valleys below, brings up to the mind images of some horrid disaster. But the train glides on safely and rapidly to the distant vale of the Juniata. The apparent danger of this passage is chiefly in going from the west to the east; for it is on the eastern declivity of the mountains.

The main track of the Pennsylvania Road is from Philadelphia to Pittsburg, nearly direct; and at this season of the year is, on the whole, as pleasant as any route between the East and the West. The principal stations on this route are as follows:

| | miles. |
|---|---|
| Philadelphia to Downingtown | 34 |
| Downingtown to Harrisburg | 73 |
| Harrisburg to Mifflin | 49 |
| Mifflin to Huntingdon | 49 |
| Huntingdon to Altoona | 34 |
| Altoona to Johnstown | 39 |
| Johnstown to Greensburg | 47 |
| Greensburg to Pittsburg | 31 |
| Total | 356 |

This distance is made in fourteen hours, at an average of 26 miles per hour, including all stops.

There are on the route many objects of interest, which can not be found, of the same kind, anywhere else. The traveler may look on the snow-covered mountains of Switzerland,—on the magnificent scenery of the Hudson,—on the calm, broad, grand waters of the Mississppi,—on the cotton plains of the South,—on the wild, ragged, gold-bearing rocks of our great western territories, but he will not in all of them see just what he sees in Pennsylvania. The impression given is not of the sublime, nor even of the beautiful, nor of the wild, but rather that of the rich, the quiet, the peaceful; of homes where men live at home, enjoying the calm rest which belongs to the contented and the happy. Leaving Philadelphia (a perfect type of inland prosperity) with its seven hundred thousand inhabitants, we soon see, spreading out on every side, those wide, green fields of grass, that waving grain, those great barns which are the types of Pennsylvania farming, and whence Philadelphia obtains those rich products, which have justly given it the reputation of having the best markets of the world. Flying past these beautiful farms, we soon reach the valley of Downingtown; and if ever human eye can be delighted with what is rich and rural, it must be here. This vale, which is formed by the Brandywine, slopes far away in the distance, with no abrupt termination, with the most gentle waves, in which grass and grain, and fruit and flowers, denote all that is comfortable and charming in the rural scenery of a rich land. We pass along, and from Chester pass into Lancaster, where Saxon industry has created American wealth. The cash value of farms in the two counties of Chester and Lancaster exceeds *ninety millions of dollars*, a sum exceeding the value of any other two counties in the United States. In this fact may be seen one of the causes which make Philadelphia a city only second to New York. As we approached Lancaster, two remarkable men who lived there were brought up to our mind. They are men who

will long live in history; for they had a part in the wonderful historic drama, whose closing scenes we now see. One of these is JAMES BUCHANAN. Here is wheatland. What thoughts must come over the crowded memory of its occupant! Early crossed in love, he lived a bachelor; and lived only for politics. He became literally a politician. Alas! for his country, only a politician. He never once rose to the strength or dignity of statesmanship. In fact, he never had the range of mind or courage of character which is necessary to the real statesman. He was a partisan; but even in that, timid, vacillating, selfish, short-sighted. It is over now; but to what dreadful scenes and dangers did that poor timid, short-sighted man lead his country!

The other man living near him, whom history can not forget, is THADDEUS STEVENS. He also, we are told, is a bachelor, and has some of the vageries which attend that condition. Stevens, like Buchanan, is a lawyer, and both have been eminent at the bar. Both, we believe, belonged to the Federal party originally; but Buchanan took care to leave the Federalists when the Democrats got a majority. Buchanan looked to general politics; Stevens rather to local. The consequence was, that the Democrats promoted Buchanan in the general Government; while the people promoted Stevens at home. In all contests in Lancaster county, Stevens was triumphant over Buchanan. During the war, Stevens has been in Congress, probably the ablest and one of the most radical of the Republican leaders. When Buchanan, by his pusillanimity, brought the country to the virge of dissolution, Stevens has been one of those who have gallently led the people through difficulty and danger to victory and triumph. History will do him justice, and place him far above the many who once enjoyed the title of President.

But we must hurry on. At Harrisburg the road crosses the Susquehanna on a fine bridge. We are soon winding round the foot of Blue ridge; ascending the valley of the Juniata, where it breaks through the mountains, not so abruptly, but quite as beautiful as in the Highlands of New York. At the foot of the hills we observed rich flower beds, planted by nature, with more than the grace and beauty of the finest garden. At length the winding Juniata brings us to the foot of the Alleghenies, and we arrive at Altoona and take a late supper at the Mountain House. The shades of night have gathered too thickly for us to observe closely the windings and tunnellings by which we surmount the granite hills. But all goes on as quietly and safely as if we were in our homes. Pittsburg is reached and we bid good bye to the Pennsylvania Central, with a conviction that it affords one of the very best routes by which the travelers can pass between the West and the East. What wonderful changes has steam locomotion produced in the migrations of man! Thousands of miles are traversed with almost the rapidity of the winds! Nations come together, and soon neither ocean or continent will be able to divide the families of men!

## THE TRAVELERS' CLUB.

One of the greatest inconveniences, and perhaps not the least of the annoyances of an intelligent traveler's experience, is the total absence of congeniality in strange places. There are many enterprising *geniuses* who, with various objects in view, have either wholly or partly encircled the globe, in all the various styles of locomotion known to civilized and savage life, who, when tired of waudering, or perhaps caught in the entangling snares of domestic felicity, and who still cherish a fondness for the changing scenes and adventures of their former lives, can, in the society of sympathizing spirits, spend an hour or two, and live over again their early years. We recollect full well not only the cordiality, but the intensity of feeling developed at the meeting, five or six years ago, of a prominent merchant of this city, who did his part towards securing the early independence of our recently erring, and still stubborn, sister, Texas, and a scientific wanderer, who has, up to this time, been unable to conquer his love of adventure, and who is now traversing the wilds of our western territory, when upon reciting scraps of their juvenile history, it was discovered that they had both experienced the same fear and hope, and had met with the same success in escaping the sad fate of the gallant FANNIN and his brave companions. The meeting of former friends is not the only advantage of associations of the kind proposed. It will render them more cosmopolitan and in listening to the tales of travel and pleasant stories of others, they will, in addition to their own experience, and without enduring the accompanying trials, be enabled to live the lives and share the knowledge of their associates.

To meet this want in that great wilderness of moving humanity, New York, where a stranger may feel more lonesome even than on the top of the Rocky Mountains, a few congenial spirits, among whom we notice such names as E. G. SQUIER, CHARLES D. POSTON, EDWARD E. DUNBAR and others, have formed a Club, of which the following are among the expressed objects:

"The objects of the TRAVELERS' CLUB may be fairly inferred from its name. It proposes to combine with the social and literary attractions belonging to the General Club the special advantages of bringing together, where their knowledge and experience may be made available to themselves and others, the travelers, explorers, and enterprising men of our own and other countries, residents and non-residents of the city of New York, and to supply a central point where the intelligent activity of the day may find congeniality and encouragement, and especially where representative men from the other American republics may become acquainted with corresponding men of our own, and make and cement those friendships and alliances, personal, political, and commercial, which experience has shown to be so essential for our common security, and which are obviously so important for our mutual interests. To a reading room — which will contain the leading periodicals of the world, and a library which will ultimately become complete for reference, and which shall possess all new standard publications, with the most perfect collection of maps that can be secured,—it is proposed to add a museum and cabinet which shall illustrate the productions, mineral and agricultural, of our own and other countries, but especially those of the American Continent, of which the United States is the natural head and should be the exemplar and friend.

"Whilst somewhat special in these respects, THE TRAVELERS' CLUB is nevertheless designed to be large and catholic in its spirit and conduct. In its sphere, it is intended to promote 'Peace on earth and good will toward men,' and by a more free and familiar intercourse between travelers and visitors of all nations, on common grounds of friendship and social ameneties, eradicate prejudices, dissipate jealousies, and harmonize interests—for there is no truth more necessary to be inculcated than that the true interests, moral and material, of all men are the same, and if truely understood can never come in conflict."

## ENGINEERING ARCHAEOLOGY.

### THE HISTORICAL LOCOMOTIVES AT KENSINGTON.

From the London Builder, No. 1143.

People talk very glibly about invention and its progress, but we have often had occasion to notice that but few have any clear notion of what industrial invention really is, while a philosophic history of invention has yet to be written. Invention has been termed the poetry of science, and one popular belief about inventions would maintain that they are struck off like the stanzas of a poetical *improvisatore*. But very few inventions, however, could be traced to such a source, and the history of the arts shows that time, accident, and tentative experiment are, after all, the greatest inventors. One of the chief features observable in the maturity of any invention is its gradual and slow evolution, by the work of many brains, of many hands, of many circumstances of time, place and chance. So slow and gradual is this progress, that the different stages in its history are as difficult to note as would be the progress of the hands of a clock unprovided with a dial plate; and the different stages are difficult to determine, not merely with regard to entire machines or processes, but also with respect to the different details and minor operations making up these engines or these processes. As a natual result, when inventors or their descendents do at last come to understand the importance and value of what they have been doing, there take place endless controversies as to priority of invention. Witness that of the blast-pipe, for which there are several claimants. The importance, for reasons of social and commercial polity, of determiuing the laws of the development

and progress of industrial improvements is scarcely recognized,—although the patent law and other laws hearing on inventions may be supposed to have some such theoretical basis. A generalization of this kind could only be conducted on a firm groundwork of historical truth, and there are many difficulties in the path of an investigation in this direction. To mention only one. There is scarcely one important modern invention which is not claimed for a distinct and different inventor in each of the more important civilized countries of Europe. The first originators of many of the different important steps in the elaboration of the steam engine are thus subjects of fierce contestation between the *savants* of England, France and Germany. It would be scarcely possible to get at any true account of a question of this kind without studying the records and claims in these three languages at least. It is the French who show the greatest ardor and vivacity in these discussions; and, we regret to say, these patriotic sentiments have not in all cases been tempered with many scruples as to the means of maintaining, or rather of annexing, honor of this kind. We say this advisedly, having in our memory some yet unpublished discoveries as to the history of the steam engine.

We thus look upon the Museum of Patents at Kensington, mainly founded by Mr. B. Woodcroft, and greatly extended by the zeal of the present Curator, Mr. F. P. Smith, as being of yet greater importance than is generally acknowledged. This Museum, even in its comparatively undeveloped state, is not merely an historical record of inventive progress,—is not merely a museum of engineering archæology,—but it is also a place whence may be drawn some most valuable lessons towards a philosophic theory of the development of invention. One lesson, apparent to the most casual observer, is that an invention is not a thing of spontaneous, inspired production, but is rather a plant of slow growth,—sown, nourished, tended, and reaped by many different hands. This view is a rather disenchanting one to take, however true it may be. The popular imagination seems to always require a corporeal object for the embodiment of its fancies. It delights in a hero, its sight does not range so far over the intellectual horizon as to perceive a principle,—it can only see a person. It is forgotten that men's powers—the term being used in the widest sense—differ but little in extent from the physical stature of a given number of persons. The popular belief thus, for instance, invests Watt with the invention of the steam engine; Arkwright with that of spinning machinery; Fulton with marine propulsion by steam; George Stevenson with the first invention of the steam locomotive. A brief account of the locomotives already existing in the Kensington Museum of Patents would dispel this last belief, and even without greatly shortening Geo. Stevenson's status. At the time we write, too, the celebrated "Sansparcil," the river engine to Stevenson's "Rocket," built by Stevenson's rival, Timothy Hackworth, is just now being re-erected in the Museum, in company with its former competitor of the famous contest on the Manchester and Liverpool Railway, in 1829.

In the matter of priority of invention in, or rather of attempts at, land propulsion by steam, the French may well claim to be our *devanciers*, and we do not think that any true Englishman will be inclined to grudge them this honor. The first steam carriage seems to have been made by a Frenchman, Cugnot, in 1769,—that same marvellous year which witnessed the birth of Napoleon I., Wellington, Humboldt, Mehemet Ali, Lord Castelreagh, Sir M. I. Brunel, Cuvier, and the first patent of Arkwright, the first patent of Watt, as also some other events almost as great in their eventual influence on the present era. An engine made by Cugnot is still in existence in the Conservatorie des Arts et Métiers at Paris. It has a copper boiler, very much like a common kettle without a handle and spout, furnishing with steam a pair of 13-inch single-acting cylinders. The engine propels a single driving-wheel, which is roughened on its periphery. Altogether, this engine bears considerable testimony to the mechanical genius of its inventor. It was unsuccessful, having got overturned once or twice on the very bad roads then existing in France, and was put on one side. It is stated, however, that arrangements were made in 1801, to put it to work in the presence of Napoleon Bonaparte. The departure, however, of Napoleon for Egypt, prevented the trial,—a circumstance which recalls Fulton's subsequent unsuccessful negociations with Napoleon for aid in attempting marine propulsion by steam. Watt, then, in 1784, patented a locomotive engine, the boiler of which was to be "of *wood*," pooped like a beer barrel. Watt, however, had not much faith in steam carriages, and he objected to the attempts made in this direction in 1784 by William Murdoch, his very able assistant. The miniature engine made by Murdoch in that year is still carefully preserved at Soho. Careful and elaborate researches, such as hose lately made by Mr. Zerah Colburn* into the history of the locomotive, seem to more and more confirm existing impressions as to the great part done by Trevethick in the introduction of the locomotive engine. In 1802, he and his moneyed partner Vivian patented the application of the high-pressure engine to steam carriages, and one of these was made, put to work in Cornwall, and exhibited in London. A model locomotive made by Trevethick in 1802 is now in the Museum of Patents, at South Kensington, having been found out in Cornwall by the present curator Mr. Francis P. Smith. The boiler is fitted with an internal double flue, and a chimney of small diameter. Mr. Colburn has shown clearly enough, and in spite of previous mis-statements, that Trevethick understood the value of the blast formed by the exhaust steam when turned into the chimney, and the practical sufficiency of the adhesion between smooth metallic surfaces for propelling the locomotive and its load. Trevethick's engine of 1804 was able to work over a rough tram-road at the rate of 5 miles an hour; but in Cornwall, where fuel was then so dear, the comparatively high quantity of coal consumed rendered this performance of inferior commercial value. The Northern districts of Newcastle-on-Tyne clearly offered the fairest opening for the childhood of the locomotive, and accordingly Mr. Blackett, the proprietor of Wylam Colliery, wrote in 1809 to Trevethick respecting his locomotive. It appears that, at the time, Trevethick replied that he was too much engaged; but in 1811, however, he sent an engine to Newcastle. It was not put on the Wylam railway, but set to drive a foundry.

At this time a locomotive was being made by Murray, of Leeds, at the order of Mr. Blenkinsop, of Middleton Colliery, near that town. It will be remembered that Mr. Blenkinsop's name is connected with the employment of a strong-rack-rail on the line, into which worked a toothed pinion driven by the engine. A horizontally-placed cylindrical boiler was used, in which were placed two vertical steam cylinders. The boiler had a single internal flue, containing the grate at one end,—like a Cornish boiler—while the chimney rose out of the other end of the flue. A pair of cranks on each side of the engine drove a toothed wheel, and these two wheels themselves propelled a larger toothed wheel, on the axes of which was a pinion with course teeth working in the rack-rail. With such a light engine as one of 5 tons, and working at the slow rate of only 3 miles an hour, Mr. Colburn considers that we should be obliged to use a rack, and that thus Mr. Blenkinsop did not deserve the ignorant ridicule which has been directed against his rack and pinion. In fact, Murray's engines on Blackett's plan were the first locomotives ever worked permanently and on a commercial scale, and this line between Middleton and Leeds is in reality the first commercial railway. It is not, perhaps, generally known in England, but it is stated by Mr. Colburn, that "as late as 1848 the rack-rail was adopted upon an incline of 1 in 17, on the Madison and Indianapolis Railway," in the United States. "This incline, which has since been superseded by a line with practicable gradients, rose from the north bank of the river Ohio at Madison, and was about five-eighths of a mile in length." The engines provided had five steam cylinders in all, actuating, in a way not to be made clear without a sketch, a cogged wheel working on a rack-rail.

The next step was the commercial working out of the adhesion of the driving-wheels. This was done by William Hedley, the colliery viewer of Mr. Blackett of Wylam; but it is probable that this would have been done by any one who first built a rather heavier engine than that of Murray's. Hedley thus, in 1813, constructed the engine now in the South Kensington Museum, but which has been at work near Newcastle, down to such a recent date as 1863. It has been known there many years under the name of the "Puffing Billy," a nickname given to its maker, Mr. William Hedley, by the colliery hands, from the fact of his being rather stout, with a consequent shortness of breath. Mr. Headly first of all made an engine somewhat like that of Trevethick's, with a cast iron boiler, provided with a single internal flue, and working by adhesion on a smooth rail. This engine was not very successful, from a deficiency of boiler power, and from the fact of its having only one cylinder; but it clearly proved the possibility of doing away with the expensive and cumbrous rack. The "Puffing Billy" was then made. The inscription on it states that it was built in 1813, by Jonathan Foster, engineer, of Wylam Colliery, under the superintendence of Mr. Blacklett, owner, and of Mr. Hedley viewer of the colliery, in order "to haul coal-laden wagons along a railroad to Lemmington, where the coals were shipped in keels." This railroad was a substitute for the old tramroad and was laid down on the site of the latter, between the years 1807 and 1811. The "Puffing Billy" has a wrought iron boiler, containing a return flue, the chimney being at the same level as the fire door. There are two vertical cylinders, driving beams centered each at one end, termed the "grass-hopper" beam—a plan first due to Oliver Evans. The motion of the wheels is given to the four wheels by toothed gearing. An original document of great interest and instructiveness, is framed and glazed and hung to this engine. It appears that the noise and smoke made by this engine were considered a nuisance by

* "Locomotive Engineering" Glasgow: W. Collins, 1864.

some of the people living in the districts it traversed. They accordingly threatened to indite the "Puffing Billy" as a nuisance, and their complaints were so strongly urged, that Mr. Blackett found himself obliged to take counsel's opinion on the matter. The barrister, no doubt a noted one in his day, evidently agreed with the neighbors in their bad opinion of Mr. Blackett's engine. The case being put to him, he writes on the back of the document, that, "It does not appear to me that there is any objection arising from the lease itself, to Mr. Blackett's conveying his coal wagons by means of this steam engine; but I think that the use of such an engine may be deemed a nuisance to A. if the smoke and noise so occasioned thereby render his habitation unhealthy and uncomfortable; but this must entirely depend upon the quantity of smoke and noise occasioned, and the distance of the house of A. from the wagon-way,"—(signed) R. Hopper Williamson, Newcastle, 12th September, 1814. But the most amusing bit is a note, apparently the result of an after thought of the learned lawyer: "If the noise of this engine disturbs the cattle grazing on the land adjacent to the wagon way, so as to injure them with regard to their feeding, I think it may be considered a nuisance." In all probability Mr. Williamson's capacity was rather above than below the average; but this is one of many more instances that shows the difficulties to be encountered in the introduction of any new thing. It is not very likely that such an opinion would now be given, or that we shall ever abolish locomotives for fear of disturbing the digestion of grazing cattle; but the first thing has been done, and the introduction of traction engines is just now greatly impeded by the same difficulties which beset the Puffing Billies of 1813. At the same time, it is clear that horses are more liable to be frightened by an engine on common roads than on a line,—or, rather, more properly speaking, the engine is brought within sight of a greater number of horses when it is made to travel on a common road. But it is well known that horses very soon get accustomed to a railway locomotive, and there is no doubt that they would just as soon forget their fear with the traction engine.

About a couple of years after the construction of the "Puffing Billy," Mr. Hedley built a yet more efficient engine for the Wylam Railway. In the same way as he had first put to commercial use the adhesion of smooth surfaces for railway traction, so did he first apply the return flue boiler and the narrow chimney. By the way, talking of "adhesion," we think that this term is often used very improperly. Adhesion only takes place between two surfaces of the same substance of the same—or of nearly the same—molecular structure, and consequently similar surface. Adhesion thus does not take place between a cast iron surface and a wrought iron surface,—between (say) a cast iron wheel and a wrought iron rail. The grip is in this case produced by simple friction without any adhesion, properly so called.

A careful observer of the doings on the Wylam Railway was Geo. Stevenson, and he persuaded his employers at the Killingworth Colliery to construct an engine which was finished towards the middle of 1814. Its boiler, 8 feet long and 34 inches in diameter, was carried on four 3-feet wheels, and provided with a single internal flue. Two vertical cylinders were placed for half their length in the boiler. The motion for driving the wheels was almost the same as that in the "Puffing Billy." It is stated by Mr. Smiles that the speed of this first engine of Stevenson's was only three miles an hour; a year's trial with it showed that it had no advantage in point of economy over horse power,—being thus much inferior to Hedley's engines. This weakness of Stevenson's first engine was due to the low boiler power produced by the use of a single flue and a chimney of large diameter with its weak blast, unaided by exhausting the waste steam into the chimney. In 1815, Stephenson made his second engine according to the patent which he took out in that year. A different kind of gearing was adopted for driving the engine, and additional adhesion was obtained by coupling the wheels of the tender to the engine by means of an endless chain. Stephenson also used springs, according to a suggestion of Mr. Nicholas Wood. George Stephenson also applied a strange and even absurd scheme to some of the Killingworth engines as a substitute for springs. This consisted in adapting a number of pistons sliding in cylinders fixed to the bottom of the boiler, and in communication therewith. Stephenson, in his own words, supposed that as they "acted upon an elastic fluid, they produced the desired effect with much more accuracy than could be obtained by employing the finest springs of steel to suspend the engine." Of course the plan had to be at last abandoned, after some unsuccessful trials. At this time, and some years previously, the placing of steam-carriages on common roads was being attempted,—a feat which is now being carried out in our own time mainly for agricultural purposes. The wedding of the wheel and the rail put an end for the time to the experiments in this direction, conducted by Griffiths, Gurney, and others. Mr. Colburn remarks on these experiments, that while road locomotives had ample adhesion, they only lacked evaporative power. "The steam blast, which for railway engines running at a slow speed, and having insufficient adhesion, was as yet hardly required, nor, for some of these engines, even admissible, was therefore of great importance to the road locomotive engineers. Goldsworthy Gurney, then a surgeon and lecturer at the Surrey Institution, has claimed the discovery of the steam-jet in 1820,—the year, by the way, in which Nicholson's patent for various applications of the steam-jet expired. In 1820 and 1821, Gurney employed the jet for promoting combustion in laboratory furnaces, for decomposing various compound bodies, and for working platinum; in 1824 he applied jets of steam, taken directly from the boiler, to increase the draught in the chimneys of the steamboats *Alligator*, *Duchess of Clarence*, &c.; in 1826 he applied steam in the same manner to increase the draught in the chimney of his road locomotive; and in an *ex parte* statement not long ago published by Mr. Gurney, he alleges that he "supplied Timothy Hackworth with the blast pipe employed by that engineer in the locomotive 'Sanspareil,' which so nearly won the Liverpool and Manchester prize in 1829." It would seem, however, that Hackworth used the single contracted blast orifice about two years previously to 1829.

Timothy Hackworth was a practical engineer of much ability, and, though not so successful as George Stephenson, it is probable that his mechanical powers were little, if at all, inferior. He helped to make the "Puffing Billy" at the Wylam Railway; in 1824 he was the manager of George Stephenson's locomotive foundry at Newcastle; becoming, in the following year, the locomotive superintendent of the Stockton and Darlington Railway. The engines of this line opened in 1825, were made by Stephenson, and they gave such bad results that it was stated that the directors, as late as 1827, were thinking of altogether giving up locomotives. Hackworth, however, took in hand one of the engines of the line, made by Wilson, of Newcastle. Hackworth applied the return-flue at the boiler, and, above all, he applied to it the blast-pipe. The "Royal George" was the best locomotive of its time, as it was, besides, fitted with the then novelties of "a cistern into which a portion of the exhausted steam could be turned to heat the feed-water; it had short-stroke force-pumps, worked by eccentrics; adjustable springs, instead of weights, upon the safety valves; and a single leaver reversing-gear."

Two years after the application of these improvements to the "Royal George," in 1829, took place the Rainhill trials on the Manchester and Liverpool Railway, which had the effect of bringing to a head most of the existing knowledge in locomotive traction. One of its most important results was the first application of the multitubular boiler to the locomotive. The invention of this important form of boiler has afforded, and still affords, a field for both intestine and international wars as to its priority of invention. The English claim the multitubular boiler; so do the French; and so do, we believe, the Americans. Perhaps a Chinese claim may be yet put forward. In the mean time, Mr. Colburn shows that it was first prepared by a London engineer, Mr. James Neville, of Shad-Thames, in specification No. 5344, A. D. 1826. This is an important document in engineering archæology, as it annihilates the pretensions of the French Claimant, M. Marc Seguin, who only patented the multitubular boiler in France in 1828.

Thus were combined and brought into practice all the essential points of the present locomotive, which has only been since improved by, in the main; the mere effect of time—of time and experiment, eliminating inferior forms of detail. Nevertheless, the then existing locomotives were by no means very successful machines; such distinguished engineers as Messrs. Walker and Rastrick reported against their use on the Liverpool and Manchester Railway; and they were confirmed in their impressions by a man of such ability as Mr. Nicholas Wood, who (just as Smeaton firmly believed that steam engines could never do better work than pumping up water for water-wheels) gave it as his conviction that no locomotive could be made to go faster than 8 miles an hour. Thus, even so late as the spring of 1829, the directors of the Liverpool and Manchester Railway were thinking of applying fixed engines and ropes for working the line. Fortunately, however, the counsels of two or three members of the board prevailed, and it was decided to make a last trial of locomotives. As one of George Stephenson's engines had already failed on the line, a prize of 500*l.* was publicly offered to all comers on the 25th of April, 1829.

The conditions that engines had to fulfill have been often published. One of these was, that the engines should burn their own smoke; and it is a pity that this "condition" has not even now been fulfilled, as every railway passenger knows to his cost. The only engine ready at the appointed time was the "Rocket," entered by Robert Stephenson; Hackworth's "Sanspareil," Braithwaite and Ericsson's "Novelty," and Mr. Brandreth's "Cyclops" were not ready at the appointed time. The "Rocket" and the "Sanspareil" (both somewhat altered) are now in the Kensington Museum, the last, as we have stated, being just now there re-erected. Both are four-wheeled engines. The boiler of the "Rocket" is tra-

versed by a number of copper tubes, and its two inclined cylinders work crank pins on the driving wheels at the front or smoke-box end of the engine. The honor of the application of the tubular boiler is not due to the Stephensons, but to Mr. Booth, the secretary of the Liverpool and Manchester Railway. The diameter of the driving-wheels was 4 feet 8½ inches, and that of the traveling wheels, 2 feet 6 inches.

With regard to the "Spanpareil," it is stated that this was the second engine to which was applied the blast-pipe, the "Royal George" (1827) being said to be the first.* The exhaust steam from each engine is taken into the chimney through a blast pipe. It also appears to have been one of the first engines with coupled wheels, of which it had four. The most striking peculiarity to the eye accustomed to the present locomotive is, that the driver stood beside the chimney, the boiler being completely traversed by a return flue. The boiler is cylindrical, about 4 feet in diameter and some 6 feet long. The fact that the apparent front end is in reality the hind portion which was coupled to the tender, has misled some of the writers of treatises on the steam engine, causing them to figure the tender in front. An inspection of the engine would appear to show that the driver stood on the tender in order to fire the boiler. The cylinders are vertical, and, in the original engine, were 7 incher in diameter, the stroke being 18 inches. The two front wheels are fitted with crank-pins, driven by the connecting-rod of each engine. The "Sanspareil" was tried on the 13th of October, 1829. The total weight of the engine and load being 19 tons 2 cwt. The failure of the feed-pump, however, led to its stoppage, as the boiler could not be kept filled with the necessary water. It was also unfortunate with regard to one of the steam cylinders cracking through the bore into the steam vent. The rate of evaporation, and consequent tractive power of the "Sanspareil,' was, however, higher than those of the "Rocket," the successful engine. It is stated by Mr. Hick, of Bolton, the donor of the engine to the Kensington Museum of Patents, that it was purchased by the Liverpool and Manchester Railway, after the trials. In 1831 it was sold to Mr. T. Hargraves, of Bolton, in order to work on the Bolton and Leigh Railway. In 1837 the old cylinders were replaced by new ones of larger dimensions, and the original wheels with wooden spokes were replaced by cast iron wheels, with hollow spokes. It continued till 1844 on the Bolton and Leigh Railway, but was, by that time, found too small and weak. Mr. Hargraves then removed it to his colliery at Cophall, near Chorley-lane, and fixed it over a coal-pit, in order to drive a pumping and winding apparatus, a pair of wheels being removed for a set of toothed gear. The boiler was not used, the engine being driven from a stationary boiler. It thus worked up to the end of 1863, when it was removed solely in consequence of the coal-pit being exhausted Mr. Hick, of Bolton, happened to pay a visit last year to the Kensington Museum and, having seen other engines there of historic fame, he determined to add the "Sanspareil" to the number Mr. Hargrave then presented the engine to Mr. Hick, who, in his turn, gave it to the Museum, where, in the words of Mr. Hick's letter, the engine, after all its chequered and eventful career, may end its destiny "in peace and not in pieces." It may not be uninteresting to state, that the railway companies on the road from Bolton to Liverpool carried the old engine free of cost, according to the suggestion of Mr. F. P. Smith, that the venerable engine which had carried so many, should, in its turn, have its own carriage franked to its last resting-place.

The "Novelty," though very unsuccessful—as it was very soon disabled by an accident—displayed high constructive power, and is considered by some good judges as being in many respects the best designed engine of the four. It was a four-wheel tank engine; its boiler consisted of an upright cylinder for the fire-box, and a horizontal barrel 15 inches in diameter, and about 12 feet long. The flame was taken from the fire-box through the barrel by means of a tube folded backwards and forwards on its way to the chimney. The two steam-cylinders were placed vertically in the framing, being 6 inches in diameter, with a 12-inch stroke. The diameter of the wheels was 4 feet 2 inches. Mr. Burstall's "Perseverance" very soon gave up, and was found unfit for the trials.

It would be a natural remark to make, that the greater number of the engines and machines which have been so long at work have been greatly altered from the original construction by the exigencies and accidents of practical wear and its attendant repairs. Like John's old knife, which still remained "John's old knife," though it had received about half-a-dozen new blades in succession, and about as many new handles, it might be doubted whether these engines really represent their original construction. In one sense this may be true, and it is probable that only a portion of the original raw metal is still in combination. But then it must be remembered that in piecemeal repairs any part repair is in a great measure tied to the original form. The new blade of the old knife has to conform to the existing handle, and the new handle has to be made to the shape of the blade. The same must be, more or less, the case with repairs to an engine or machine. At the same time, such a consideration points to the absolute necessity for a correct history—or rather engine biography—being appended to each engine, pointing out where and what alterations and repairs have been made.

The Patent Museum at South Kensington, only yet needs the "Novelty" to complete the trio of the engines which figured at the great Rainhill contest. It is not now known where the "Novelty', at present is, or indeed, whether it is even still in existence. We believe that Mr. F. P. Smith is anxiously looking about for it, and we hope that he may be successful in his search. What lessons of the way in which "Fortune turns her wheel" may be read by a look at these old engines,—the progenitors of the apparatus,—the use of which stamping its impress on present life in so many direct and indirect ways. The two Stephensons are now dead, but their engine, which killed Mr. Huskisson, raised their fortunes above those of perhaps any other engineers of their time. Timothy Hackworth is now dead, but his works at Newcastle, like those of the Stephensons are still flourishing. The Messrs. Braithwaith are now living, but their factory has been given up, and their partner of 1829, the Swedish engineer, Ericsson, is now building "Novelties," in the way of gunboats for the Federals. In centuries hence, time will have thrown its halo of distance round these engineers, and their doings will be scanned with a kind of romantic interest. Let us hope that, in the course of the next century, the Government will have provided a decent building for the objects which represent such important interests, but which are now sheltered in the crowded and dark shed at South Kensington.

* See the London *Quarterly Review* for 1858, and the *Practical Mechanics' Journal* for 1850 and 1851.

## THE FINANCIAL FUTURE OF THE SOUTH.

We are gratified at the assurance received from every quarter of the South that the people are not giving way to a feeling of discouragement and sullen despair on account of the seeming difficulties and obstacles surrounding them, but are applying themselves with zeal and earnestness to the task of recuperating their resources, impaired by the four years' struggle, replanting their fields, long neglected, and building up their trade and commerce so competely broken down by the iron heel of war. The people have simply to act in this spirit to put their shoulders to the wheel and push forward with energy the work devolving upon them, and they will soon, very soon witness the regeneration of the South, the restoration of the States to at least something like their former prosperity. Though flooded with a spurious currency and devastated by hostile forces, the capital of the South—her lands, stock and implements of labor, which were the original source of her wealth—still remain. There are also numerous laborers, thousands of men returning home from the disbanded armies, in addition to the negroes, to till the soil. They have thus the two essential requisites, labor and capital, for achieving fresh wealth and prosperity, and they have only to make a proper use of them in order to reap these results.

John Stuart Mills remarks on this head in his Political Economy, "The perpetual consumption and reproduction of capital affords the explanation of what has so often excited wonder, the great rapidity with which countries recover from a state of devastation, the disappearance in a short time of all traces of the mischief done by the ravages of war. An enemy lays waste a country by fire and sword, and destroys or carries away nearly all the moveable wealth existing; all the inhabitants are ruined, and yet in a few years after everything is much as it was before. There is nothing at all wonderful in the matter. What the enemy have destroyed would have been destroyed in a little while by the inhabitants themselves; the wealth which they so rapidly reproduce would have needed to be reproduced, and would have been reproduced in any case and probably in as short a time. Nothing is changed except that during the reproduction they have not now the advantage of consuming what had been produced previously."

Very auspiciously for both the North and South the war ended in spring time, thereby enabling the two sections to avail themselves during the present year of the work of those absent in the service. Many of Johnston's as well as Dick Taylor's men, in their haste to return home and plant their crops, did not wait to arrange the matter of paroles, but took their departure so soon as the surrender was made known. They and the civilians have now entered upon their new career, under auspices by no means unfavorable The debt incurred abroad during the war being cancelled by the fact of the failure of the revolution, does not rest upon their shoulders. It is true that holders of the confederate loan in Europe still manage to keep it up to the nominal figures of thirteen or fourteen, in hopes that the seceded States may on reorganizing recognize it. They can set their hearts at rest on this point, however. The people of the South will not trouble themselves in the future about their indebtedness to those abroad who encouraged and led them forward in the path of error. The Southerners have, therefore, no debts to cancel, except those

incurred at the North prior to the war. Their confederate issues, foisted upon them by the Richmond junta, will of course realize nothing except what they may bring among Northern soldiers and civilians as souvenirs of the war. Scattering freely among the people, each one will doubtless lose by means of their worthlessness, in proportion to his amount of property. They are not so exhausted, however, as to be unable to avail themselves of the federal greenbacks, and thus once more inaugurate a safe and substantial currency among them. Owing to the difficulties experienced in running the blockade and the Richmond enactment prohibiting the exporting of cotton on private account, but a small part of the cotton crop of 1861 and 1862 has left the country. Wherever our our troops have gone, whether to New Orleans, Vicksburg, Savannah, Columbus or Macon, or up the Red, Mobile, Alabama, Yazoo or Savannah Rivers, they have found immense quantities of this staple. The editor of the *Atlanta Intelligencer* estimates that there are now in the singte State of Georgia alone nine hundred thousand bales of cotton, or one half as much as was exported from the whole country to Great Britain from September, 1857, to August, 1858. There are also large quantities of rice, sugar, tar, turpentine, pitch, tobacco, and superior red pine timber scattered through the seceded States. The demand at the North and abroad for all these articles is very great. The Southerners, therefore, possess in them a great source of wealth and can to a considerable extent supply themselves with the federal currency. There is, likewise, considerable specie among them, w ich has been hid away during the war to prevent its seizure by the rebel authorities, and will now come to light. We may expect, therefore, to see the South soon flooded with greenbacks.

The herculean labor incident to a long struggle have developed among the Southern people an energy and spirit of enterprise in place of the enervation and effeminacy before existing, and the impetus thus given to labor will carry them rapidly forward in the work of developing their resources. There are untold mines of wealth in many of their mountainous regions which will not be worked and made to yield great profits. This is especially true of the Cumberland range, extending through Eastern Tennessee and Northern Georgia and Alabama. A private letter received a few days since from one of our officers in that vicinity states that we at the North have little idea of the hidden fortunes yet to be discovered in those wild, mountainous regions. A Petroleum Company has already been organized in Eastern Tennessee, of which Major General Thomas is President and one or two other generals are direetors.

Many Southerners, who in years gone by have despised labor and contributed nothing to the public prosperity, will now, by reason of their changed condition, be compelled to labor and thereby contribute to the wealth and development of their section.

The overthrow of the baneful system of serfdom, which has been on the "sunny South" a terrible incubus, will serve in time to increase her financial prosperity. Deprived of their slaves the masters must themselves labor, while the slaves, transformed to freemen and stimulated by the assurance of reward for their toil, will not he indolent and to a certain extent worthless as heretofore. Thus will they together contribute to the growth and development of the late so-called Confederacy.

Northern labor and capital, which are rapidly finding their way into the South, will infuse new life and energy among the people, open up new avenues of trade, and eventually make the South the wealthiest as it is now the most prolific, section of the country. Hear what an intelligent English observer of American affairs says on this point: "The facts we have been reveiwing open to us a happy prospect of what will be after the war. The firy spirit of the South will be gone. There is no difference of race, or speeeh, or law, to maintain a feeling of hostility. There is nothing to prevent Northern settlers from amalgamating with Southern residents. The negro question being settled, there will be nothing to maintain a distinction between the two sections. Engaged in the same pursuits, resorting to the same courts, electing members to the same legislatures, there will be nothing in this case resembling those in which a nation is overrun and deprived of its rights by an alien power."

Such is the future which lies before the South if her people continue obedient to the laws of the land. Already do we witness on every side a rapid re-establishing of the relations which existed prior to the war. Aided by government all the various lines of railroads from the Potomac to the Gulf are being re-established. New Orleans now has telegraphic communication, through the heart of the South, with New York. Regular steamboat communication has been re-established between the North and Richmond, Fredericksburg, Norfolk, Newbern, Wilmington, Charleston, Savannah, Mobile, and other points in the South. The blockade will soon be removed from the Southern ports, and trade and commerce once more resume their former channels.—*Economist.*

## MARIETTA & CINCINNATI R. R.

### REPORT FOR 1864.

We have received the fourth annual report of the Marietta & Cincinnati Railroad Company for the year ending December 31, 1864.

#### BALANCE SHEET.

The balance sheet of the company gives the following:

| Dr. | |
|---|---|
| Railway and Equipment | $9,926,124 19 |
| Union Railway purchase (on account of), in cash | 111,346 67 |
| Union Railway purchase (on account of), in bonds | 50,971 91 |
| Hillsboro & Cincinnati Railway purchase (on account of), in cash | 4,486 65 |
| Hillsboro & Cincinnati Railway purchase (on account of ) in shares | 1,816,140 09 |
| Scioto & Hocking Valley Railway purchase | 890,000 00 |
| Material on hand | 115,521 15 |
| Cash due from Banks and Bankers | 466,012 42 |
| Real Estate | 297,524 79 |
| Construction—Main Line | 1,.36,618 37 |
| " —Cincinnati Extension | 871,9 4 23 |
| Discount on 1st Mortgage Bonds | 108,59) 58 |
| | $15,805,315 35 |

#### CAPITAL STOCK.

| Cr | |
|---|---|
| 1st Preference Shares and Scrip | $6,205,474 67 |
| 2d " " | 3,819,771 78 |
| Common Stock and Scrip | 2,022,484 75 |

#### LIABILITIES.

| | |
|---|---|
| Sterling Bonds issued | $1,000,000 00 |
| Dollar Bonds issued | 1,691 292 99 |
| Scioto & Hocking Valley R. R. Mortg | 300,000 00 |
| City of Baltimore Loan to Union R. R. Company | 20,000 00 |
| Pay Roll | 37,332 46 |
| Bills Payable | 18 494 45 |
| Cash Dividends on Preference Shares (unpaid) | 14,515 50 |

#### PROFIT AND LOSS.

| | |
|---|---|
| Balance resulting from Net Earning | 675,918 76 |
| | $15,805,315 35 |

By this account it will be seen that the Company is free from floating debt. It has hands sufficient to complete the work of the extension of its line so as to secure the benefit of its proposed entrance into the west end of the city of Cincinnati, enabling it to make close connections with the three great lines of railway extending from that city westward, and reaching all the great business centers of the States of Indiana, Illinois, Missouri, Iowa, &c.

#### REVENUE ACCOUNT.

*Receipts.*

| | |
|---|---|
| Passenger | $466.913 74 |
| Freight | 518,167 85 |
| Mail | 23 079 82 |
| Express | 15,316 80 |
| Telegraph | 13,796 03 |
| | $1,038,165 25 |

*Expenditures.*

| | |
|---|---|
| Locomotive running | $93,798 85 |
| Locomotive repairs | 56,166 94 |
| Repairs of passenger and baggage cars | 13,988 26 |
| Repairs of fre ght cars | 30,004 04 |
| Repairs of construction cars | 631 78 |
| Road repairs | 87,181 93 |
| Stations—Rent and repairs | 5.666 64 |
| Traffic expenses | 158,305 55 |
| Telegraph expenses | 9,218 49 |
| eneral charges | 66,017 56 |
| Portsmouth branch | 94,787 02 |
| Balance to profit and loss | 427,405 14 |
| | $1,038,165 25 |

#### CONSTUTCTION ACCOUNT.

The expenditures on account of construction for several years were as follows:

| | |
|---|---|
| 1860-2 | $157.623 98 |
| 1862-3 | 319 017 82 |
| 1863 (six months) | 245.120 00 |
| 1864 | 714,.87 37 |
| 1864—Cincinnati Extension | 870,133 13 |

#### DIVIDENDS.

Two dividends of three per cent. were declared during the year: one in August, of cash, on the first preference shares, and the other in March, of stock on the first and second preference shares, payable in kind. In consequence of the decision of the Supreme Court, affecting the franchise of the company, the payment of the stock dividend has been delayed; but this difficulty has been obviated.

#### COMPLETION OF THE MAIN LINE.

The work required to complete the main line has been prosecuted in the face of serious discouragements, arising from the scarcity of labor and the high prices of all kinds of supplies required for that purpose. Notwithstanding these difficulties, the contractors, Messrs. Dodge, Balch & Co., have maintained a good force on their work, prosecuting it with great energy, and making considerable progress toward its completion. The aggregate length of trestling which has been filled under their contract amounts to two and fourtenths miles, embracing 764,239 yards of embankment. They have also built 2,651 yards of arch, 10,690 yards of bridge, and 2,778 yards of culvert masonry.

Also the masonery and embankment required under their contract, west of Warren Station, except one culvert and about 1,000 feet of trestle yet to be filled, has been completed; thus giving us a permanently built, substantial track from Loveland eastward, for the distance of 140 miles. Considerable progress has also been made in filling up the trestles between Warren's and the Obio river. The temporary grades, which have hitherto proved serious obstacles in working the road, have been, in many cases, removed.

The track from Harmar and Belpre, westward, to Tunnel Station—a distance of 15 miles—has been brought to a proper surface

and well ballasted. There have been constructed since the reorganization of the company 3,008 lineal feet of new bridges.

OHIO RIVER BRIDGE.

A contract has been concluded with the Baltimore & Ohio Railroad Company, providing for the coustruction of a railroad bridge over the Ohio river at Parkersburg, so as to connect their road direct with this line.

The structure is planned for stone piers and abutments across the river—a stone viaduct on the eastern side and earth embankment on the west side to connect the tracks of the respective roads.

The superstructure of the bridge will be of iron, and the whole structure built in accordance with the provisions of an act of Congress "To regulate post roads," passed May, 1861.

Considerable progress has been made in stripping quarries and getting out stone for the piers and abutments. It is the intention of the parties to contract to press the work forward with the utmost vigor during the coming season. The Northwestern Virginia road is now the property of the Baltimore & Ohio Company. Upon the completion of the bridge, their ownership will therefore extend to the west bank of the Ohio river, thus giving the best assurance for cordial co-operation in building up a traffic in what, to them, will be the shortest route to Cincinnati, St. Louis and the Southwest.

LOCAL BUSINESS.

For over three years the road has been sustained almost entirely by its local resources. This source of revenue is in every respect the most valuable. It is not subject to the misfortunes or policies of others.

Its extent and value is more dependent upon the skill and care with which it is developed, and is therefore a more reliable source upon which to calculate a permanent income.

Its constant increase from the first opening of the road to the present time is a matter of much gratification to the managers and owners of the road.

The gross receipts for the year 1857—then as now, mainly from local sources—were $386,000. We have now a gross amount of $1,038,165 25, of which $171,256 58 is from the Portsmouth Branch.

MISCELLANEOUS.

The Treasurer's account of the Company presents an increasing amount of business, especially when it is considered that out of $518,167 86 received on account of traffic, but $66,000 was for through freight; and out of $466,913 74 received for fares, but $600 was paid by through passengers during the year. This meager account of through business results from the constant interruption of travel by the eastern connections of the Company in consequence of the war.

Appended to the report is a large geological map of the region traversed by this road, accompanied by an interesting geological description from Prof. E. B. Andrews, of Marietta College. Mr. Andrews gives many facts relative to the coal, iron ore, salt, petroleum, &c., found in the vicinity of the road.

OIL CREEK RAILROAD.—Extensive preparations are being made to complete the Oil Creek Railroad as far as Petroleum Centre, by August or September next. We are informed that 360 men are to be put on the work this week. This will be alike gratifying to the people of Titusville and Petroleum Centre and the traveling public. The work should never have been suspended.—*Titusville Petroleum Reporter.*

## RESPONSIBILITY OF CARRIERS OF GOODS FOR DAMAGE BY FIRE.

At the January Term of the New London (Ct.) County Superior Court, was tried the case of Christopher Culver *vs.* Norwich and New York Transportation Company. Upon the trial of this case upon the issue as on file, the Court, having heard the parties with their witnesses and counsel, finds the following facts, viz:

That the defendants, at the time of the injury complained of by the plaintiff in the several counts of his declaration, and for nearly three years prior thereto, were common carriers of goods, wares, and merchandise by steamboats called the "City of New York" and the "City of Boston," between the city of New London and the city of New York; that from the first day of May to the first day of October, 1864, the said steamboats left New York for New London regularly—the said "City of New York" on Mondays, Wednesdays and Fridays, and the said "City of Boston" on Tuesdays, Thursdays and Saturdays, at 5 o'clock in the afternoon, and arrived at New London the following mornings between the hours of half past twelve and half past one o'clock; that the plaintiff delivered to the defendants, in New York, the goods mentioned in his declaration, to be carried by them on board of the said steamboat "City of Boston," to New London, on Saturday, the 7th day of May, 1864; that the said goods were placed on board of the said steamboat by the said defendants, and were safely and securely carried by them on board of said boat from New York aforesaid to the said city of New London, where they arrived between the hours of half past twelve and one o'clock in the morning of Sunday the 8th day of May, 1864, that between the time of said arrival and four o'clock on the same morning, the defendants, in conformity with their uniform usage which has prevailed ever since they have been engaged in the business of common carriers as aforesaid, and was well known to the plaintiff, landed the said goods from said steamboat and safely and securely deposited the same in a suitable depot or warehouse situated near the wharf, in said New London and occupied by the defendants jointly with the Norwich and Worcester Railroad Company and the New London Northern Railroad Company, there to remain without charge until the plaintiff should be ready to take them away; that the said depot and warehouse remained open from the time the said goods were deposited therein until 8 o'clock in the morning of the said 8th day of May, during which time the plaintiff might, if he had chosen to do so, have removed his said goods therefrom, though it had not been the custom of shippers by the Saturday evening steamboat, who resided in New London, to remove their goods from said depot or warehouse until the Monday following; that the said depot or warehouse with the said goods of the plaintiff therein deposited as aforesaid, was closed and securely locked on the morning of the said 8th of May, at 8 o'clock, as was uniformly the case on Sunday mornings; and between the hours of five and seven o'clock in the afternoon of the same day, the said depot or warehouse, and the said goods of the plaintiff deposited therein, were wholly destroyed by fire; that the said fire was not caused by any negligence or want of proper care on the part of the defendants, nor were the said building or goods consumed through any fault or negligence on their part.

The Court further finds, that by the uniform custom and course of business, as was known to the plaintiff, the goods for persons in New London were separated from the other freight when the boat was unladen by the defendants, and were deposited in said depot or warehouse at a particular place by itself, but there was no attempt to separate one man's goods from those of another, and in dry weather the heavy goods belonging to parties in New London was usually removed from the inside of said depot or warehouse and placed on the platform on the outside thereof by the employees of the defendants in charge of said depot or warehouse, for the accommodation of the truckman employed by the owners to take them away, and in such cases the said goods have been taken by the truckmen from said platform. But dry goods and light packages, like those described in the plaintiff's declaration, have been uniformly taken by the truckmen employed by the owners from the inside of said depot or warehouse where they were deposited when landed from said boats.

The truckmen in all cases were paid by the owners of the goods, never by the defendants.

In some cases truckmen were sent regularly to the depot after the goods, by the owners, and in other cases (and it was so with the plaintiff's goods on all previous occasions where the same had been transported by the defendants) a person in the employ of the defendants for other purposes, but who owned a dray outside of his employment by the defendants, did the carting from said depot or warehouse, but such person was neither employed by nor paid for his services by the defendants, but did it on his own account and was paid for it by the owners of the goods. Whenever any goods were taken by truckmen from said platform or from the inside of said depot or warehouse, the defendants always had an agent present who checked or took an account of the same at the time they were so taken.

Upon the foregoing facts the Court rendered judgment in favor of the defendants to recover of the plaintiff their costs.

By LOOMIS, Judge.

TRIAL OF A NEW PATENT BRAKE.—The Detroit *Free Press* gives a lengthy account of the trial of the Patent Railroad Brake, of A. I. Ambler and Isaac Crane, upon the Detroit and Milwaukee Railroad:

The train to which the brake had been attached left the depot at the usual time of starting in the morning. By request, the engineer moved slowly through the yard, setting the brake to enable those interested to see that everything worked smoothly and in line. This test being satisfactory, and finding that the brakes were under his control, they were constantly and simultaneously released, and the train moved on at its usual rate of speed. Mr. J. McGregor, of the car department, accompanied the train as far as Royal Oak, but the full capacity of the brake for the most rapid stopping was not made until the train reached Drayton Plains, it being used, however, in a suitable manner for every-day business, until that point was reached, bringing up the train in about half the distance required by the band brake system. Before reaching Drayton Plains, Mr. Ambler requested the engineer, Mr. Oscar Holmes, to give the brake a trial for still more rapid work, so as to test its capacity for stopping the train in case of imminent danger or disaster, and instructed him to run boldly up to the station at as high a rate of speed as though he intended to pass the station without stopping; to suddenly apply the power and leave the brake to do its

work. These instructions were strictly followed, and with a wet and slippery track (it having rained all the way,) without breaking the tender or using the brakes—without sand or reversing the engine, and with a speed of over thirty miles per hour, the train was brought to a dead stand in 350 feet! being the best braking ever accomplished. And this, too, without sliding the wheels, and without concussion of the cars, producing an effect so perfect and uniform as to astonish those who witnessed its operation. The engineer accomplishes the wonderful result with an application of power which he can move and control with his finger with the most perfect ease. The braking was continued and the power used at every station until the engine was exchanged at Holly; the services of the brakeman for operating the band-brake being in no instance required during the trip. The hand brakes remain, however, by application of this brake intact, their efficiency and reliability being entirely unimpaired by its action.

## PETROLEUM, OLIVE OIL, WHALE OIL, LARD OIL.

Every period of the world's history has had its special time for developing some new and wonderful discovery, the result of science or accident, and perhaps no one article in use has engrossed more of the attention and study of scientific men, and the investment of so much capital, as *oil*. Yet these men were not charged, as now, with having "oil on the brain." Whale ships were provided for three-years voyages, and the time in which the capitalist was to reap his return, if "whales were found in sufficient quantities," was not looked upon as an objection to further investments. Time passed on; the vast improvements in mechanics were daily increasing the demand for *oil*. *Whales* were scarce, and it was found impossible to keep the machinery of the world moving for the want of oil. Then France begun her *olive culture*, which served, in a great measure, to supply the deficiency. But the increased demand was soon apparent, and again the machinery begun to give evidence of a want of a little more oil Then came "lard oil." The hog crop was at once proclaimed equal to every possible demand, and so it was for a few years But this, too, after a time, proved inadequate, and recourse was had to nature's great laboratory and its product—petroleum. As the demand increased, whale, olive and lard oil could not keep one-half of the machinery of the world in motion, to say nothing of the thousand other uses for oil. Nature alone, without the aid of any chemist, began to produce oil, and to-day we have only to bore a hole, and "let it run."

It is perfectly foolish for any one to say that oil is not a great "institution." The world at large requires it, and it must and will be developed. Some say that the whole thing is a speculation; a trap to sell stock, and cheat honest men out of their money. But the petroleum interest is a legitimate business, and although five hundred million of dollars is already invested in the business, and as much more will be, yet it will pay; for to-day the actual product is equal to almost any other mineral in the country, and if the wells that are now being sunk should be as successful as those heretofore put down, this year will not have passed before the oil product will be greater than all the gold, silver, copper, iron, lead and other mineral productions. Every company which makes a good selection of lands, and will develop the same, can not fail to succeed, for it is almost impossible not to obtain oil if proper care is taken in selecting good lands.

One well of fifty barrels per diem will pay a larger interest on one million of capital than any other legitimate investment in the country. It is true that many companies have been formed simply to sell stock, and not to develop the oil; but a half at least have been organized on correct business principles, and are doing all in their power to develop their lands and promote the interests of their stockholders. Many bogus companies have failed, and many more will go under because their lands are the next thing to worthless, but those that survive will have more of business management, and will ultimately realize large profits. The field of operations is large, and with an almost unlimited demand for oil, no other business will claim more interest, or afford a larger return. Those who have lost their money by investing in bogus and badly managed companies will have gained wisdom by experience, and throughout the whole of the great basin bordering the Allegheny range, the business will have, in a few years, become stable and permanent, and as necessary to trade and commerce as that of coal and iron

## RAILROAD MANAGEMENT.

The relations of the officers of incorporated companies to such companies, and the question whether they, as second party, can, through themselves, make contracts with such companies, have already been settled upon legal principles. In the opinion of the New York *Tribune*, however, the officers of some of these companies may not always conduct their business in observance of these principles. The statement is made that "it is a very current impression that the managers of our railroads take the lion's share of their profits, remitting but a Flemish account to their simple stockholders. It is further believed that this advantage is taken in the shape of contracts to furnish rails or other materials, commissions on the negotiation of bonds, etc., etc.—financial operations felt to be of questionable propriety, but which are not so generally known to be in flagrant contravention of the law."

Legal authorities on this subject, quite applicable and of general interest, are then cited. In the case of the Aberdeen Railway against Blakie & Brothers, before the British House of Lords, it was decided that the managers of railways and of all joint stock companies, while in discharge of their duties as such managers, act in a fiduciary capacity, and can not make bargains with themselves—that is to say, President Smith or Director Jones can not buy rails or bolts or ties for the company from himself as a contractor, or from the house of Smith, Jones & Co., whereof he is a member; and, if he attempts or assumes to do so, the contract or bargain is utterly null and void, no matter whether essentially equitable or not.

The action was by the Messrs. Blakie, iron-founders of Aberdeen, against the Railway Company for non-performance of a contract, whereby the Company had agreed to purchase and accept from the Messrs. Blakie certain iron chairs which they were to manufacture for the Company at a specified price.

The principal defence was that Mr. Thomas Blakie, the managing partner of the firm, was, at the time of the making of the contract, a Director, and, indeed, Chairman of the Railway Company, and so incapacitated from dealing in that character with his own firm.

The decision was that the contract was incapable of being enforced, because it is expressly voided by an act of Parliament. And it was laid down by Lord Erskine, in an analagous case, that, without any consideration of fraud or looking beyond the relation of the parties, such a contract is void as interdicted by the policy of the law.

Lord Cranworth, the Chancellor, in announcing the decision in the case, declared the director of a railway company to be a trustee, and as such, precluded from dealing, on behalf of the company, with himself, or with a firm of which he is a partner.

It is a rule of universal application that no trustee shall be allowed to enter into engagements in which he has, or can have, a personal interest conflicting, or which may possibly conflict with the interests of those whom he is bound by fiduciary obligation to protect.

So strictly is this principle adhered to, that no question is allowed to be raised as to the fairness or unfairness of a transaction.

No man, in a court of equity, is allowed to buy and sell the same property. He can not sell to himself.

The rule which precludes an agent or trustee from dealing to his own profit with his principal or *cestui que* trust is applicable to all contracts, whether as to real or personal estate, or as to mercantile transactions.

In the case of Gardner *vs.* Ogden—decided in the Court of Appeals of New York at the December term, 1860—the principle laid down in the Aberdeen Railway case is cited with approval.

It has been repeatedly decided in the Court of Appeals that the stockholders in a joint-stock company are the *cestui que* trusts and the directors the trustees.

Chancellor Walworth, in Robinson *vs.* Smith, (3 Paige, 232.) says: "I have no hesitation in declaring it as the law of this State that the directors of a moneyed or other joint-stock corporation who willfully abuse their trust, or misapply the funds of the company, by which a loss is sustained, are personally liable as directors to make good that loss. And they are equally liable if they suffer the corporate funds or property to be lost or wasted by gross negligence or inattention to the duties of their trust."

These are settled principles of British and American law, founded in equity, reason, and public policy; and they ought to be everywhere proclaimed and enforced.

European and North American Railway.—The report of E. R. Burpee, Civil Engineer of the survey of a line of railway from St. John, New Brunswick, to the boundary of Maine, through the Douglas Valley, has just been published.

The route is surveyed from the station of the European and North American Railway at St. John, either through Portland to the suspension bridge where it crosses the St. John river, or through Carleton to the main line west of the bridge. It reaches the American boundary on the St. Croix river, a distance of 88¼ miles.

The estimated cost from the suspension bridge at St. John to the American boundary is $2,750,000, or a little over $30,000 a mile, which is considerably less than the average cost of most lines on the continent. The report claims that the country is very favorable, the grades light, and the length of curved line only twenty-eight miles.

After leaving the St. John river, the country traversed is mostly on the head of streams, thus diminishing the amount of bridging. In the estimate of the line through Portland, the most important item of expense is the proposed suspension bridge over the St. John.

By law the roadway must be seventy-five feet above high tide, which requires a span of 620 feet, about 200 feet less than that of the suspension bridge at Niagara. The cost is estimated at not over $200,000. By building

abutments from extreme low water on either side, the span may be reduced to 500 feet, at which length a tubular or girder bridge is practicable.

The report tells us that while the New England roads cost an average of $44,000 per mile, and the Nova Scotia railways about $50,000, this road from St. John to the boundary of Maine can be constructed in a superior manner at a cost of only $30,000.

The conclusions of the engineer are certainly very favorable to the construction of this link in the proposed enterprise of the great European and North American Railway, which is to connect Boston with Halifax by a continuous line of rail, seven hundred and six miles long. —*Boston Advertiser.*

THE LEESPORT AND MOSELEM RAILROAD COMPANY, incorporated by the Legislature last winter, has been fully organized, and Nicholas Hunter, Esq., of Moselem Furnace, Berks Co, elected President. The stock of the company has all been promptly subscribed for, and the immediate making of the road depends upon the promptness with which the bonds of the company are taken. This road will be of some importance to the interests of this region by opening a new section of country, and a more direct route to the Lehigh, and therefore commends itself to the consideration of our business community. The road commences at Leesport, on the Philadelphia and Reading Railroad, eight miles above Reading, and extends to Topton, on the East Pennsylvania Railroad, opening a new avenue to New York, and new means for supplying local demands. The company will issue six per cent. bonds, guaranteed by the Philadelphia and Reading Railroad Company, and receivable to the extent of 33⅓ per cent. thereof in payment for freight on merchandise passing over the Leespart and Moselem Railroad, or over this road and the Philadelphia and Reading Railroad.—*Pottsville Paper, June* 10.

## MONETARY AND COMMERCIAL.

The condition of our local money market is easy. The supply of currency is ample, and the demand for loans light, although as great as is generally experienced at this season of the year. First class borrowers obtain money at about 8 per cent., while good paper generally is discounted at from 8 to 10. The Exchange market is firm at 50 to 75c. premium per $1000 buying and 1-10 selling. The gold market during the week has ruled strong, but at the close became weak and lower. The daily changes have been as follows:

| | Opening. | Highest. | Lowest. | Closing. |
|---|---|---|---|---|
| June 15..... | 143½ | 147⅝ | 143½ | 147⅜ |
| " 16..... | 145 | 145 | 142⅛ | 143¼ |
| " 17..... | 145⅜ | 145¼ | 144 | 144¾ |
| " 19..... | 142½ | 142¼ | 141¼ | 141⅜ |
| " 20..... | 139 | 141 | 137½ | 139¼ |
| " 21..... | ..... | ..... | ..... | ..... |

The quotations for exchange and coin are as follows:

| | Buying. | Selling. |
|---|---|---|
| New York..... | 50@75c. | 1-10c. prem. |
| Philadelphia..... | 50@75c. | 1-00c. prem. |
| Boston ..... | 50@75c. | 1-10c. prem. |
| Baltimore,..... | 1-10c. dis. | par. |
| Gold..... | 37@37½ pm. | 40@41 prem. |
| Silver..... | 27@30 pm. | 30@33 prem. |
| Vouchers, city..... | 2@3 dis. | |
| Vouchers, country. | 5@15 dis. | |
| Certificates..... | ½ dis. | par. |

In the New York market, says the *Tribune*, "money is easy at 4@5 per cent., and can be had at the latter rate upon anything regularly called at the Stock Exchange. In commercial paper no change. The recent restoration of the trade of the Southern States to the freedom enjoyed before the rebellion will soon employ some of the capital now idle at the North."

In reference to stocks the *Tribune* says:

"Government stocks are steady, and wanted by banks. Border State stocks are strong and more disposition shown to buy Tennessee, Missouri and North Carolina 6s. Holders are firm, and large amounts can not be readily obtained. Atlantic Mail Steamship Company is higher under its dividend, and closes at 175@178. Railway shares were irregular, but generally strong. There is very little outside buying, and professional speculators have the field to themselves. The dividends to be made by several railroads earning large sums of money are to be borrowed—a fact which accounts for much of the hesitancy by the public to purchase what are termed "cheap stocks." Late in the day stocks were lower, with hardly an exception. It is a brokers' market, and strictly commission houses are doing very little. The closing rates were: New York Central, 94½@94⅝; Erie, 77⅝@77⅞; Hudson, 108½@109; Reading, 96½@96¾; Southern, 65¼@65¾; Pittsburgh, 69½@69¾; Rock Island, 100@100¼; Fort Wayne, 96½@96¾; Quicksilver, 52@52½; Cumberland, 42@42½.

Now that the business created by the war for railroads is drawing to a close, much uneasiness is felt by holders of railway securities as to the future earnings of their roads, and that too without reason. That there will be a great shortening of surpluses, and in some cases a scarcity of means on which to declare astounding dividends there can be no doubt; and that there may also for a few months be a scarcity of business on many lines may also be true. The great question is, will this state of affairs continue? Is the dearth of business to be permanent? The war and hazardous speculation has brought about a sort of fictitious condition of almost everything, and although railway securities, as a whole, did not appreciate as much as some other things, yet, at the same time, they yielded more or less to the influences by which they were surrounded, and attained a fictitious value. That they will seek their proper level is to be expected, and it would not be unreasonable to expect that many really meritorious securities will, though the influence of operators go far below that point, but the natural bouyancy of worth will force them to the surface.

In this same transition of values in other commodities will be found one leading element in the falling off of the business of railroads. It is unpleasant to buy heavy stocks, for either home consumption or export, on a falling market. When the prices of merchandise and produce assume their true relative positions, and the price of labor is at a corresponding standard, then railroads will do a healthy and remunerative business; but then the "slack times" will bear heavily upon them. It is to be hoped, however, that they will not adopt in the interim a cut throat policy for the sake of business, remembering that nothing can be gained by doing business at a loss or by forcing trade out of its natural channels.

## GOVERNMENT TRANSPORTATION.

GENERAL ORDERS No. 17.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., March 16, 1865.

1st. For the purpose of producing uniformity in the Transportation service and guarding against abuses, blank books of Transportation Orders will hereafter be issued from this office to the Chief Quartermaster of each Department, to be by him immediately furnished to each officer under his order entitled to issue the same; after the receipt of which no other form will be used, unless in emergencies when the prescribed blank form cannot be had, and then the reason for not using it must be stated in the order.

These blank orders will be numbered and registered in this office in such manner that there will never be two orders of the same number in circulation; they will be charged to the Chief Quartermaster to whom sent, who will in like manner charge and hold responsible his subordinate officers.

On exchange of posts, or on transfer to another officer, like receipts must be taken and forwarded to the Chief Quartermaster of each Department.

2d. Within five days after the end of each month, a concise report will be made to the Department Quartermaster of the number of orders issued, the number cancelled by error (which must accompany the report), and the number remaining on hand, with a statement of the amount of transportation furnished in the month; which report in a condensed form (accompanied by the orders so cancelled) will be by him immediately transmitted to the Quartermaster-General, under envelope, endorsed on margin "Rail and River Transportation."

3d. The marginal register should contain the substance of the order issued, and will be preserved by the officer issuing for his own protection, or return to the Department Quartermaster or this office, as may be hereafter required.

*Care should be taken at all times to keep on hand a sufficient supply of these blank orders*, which can be obtained upon application to the proper Senior or Department Quartermaster.

4th. Unless in extraordinary circumstances, all rail and river transportation, passenger and freight, at any post, will hereafter be under the control and management of a single officer, on whom requisitions will be made by other officers requiring transportation.

5th. When more than five persons, in one party, are to be transported over one road, or a continuous line of roads, separate orders for transportation must be issued for each road to be passed over. These orders should be received on the train instead of tickets, and are to be receipted by the party named in the order, and given up on the cars—the officers, or persons in charge, filling the receipt with the number actually carried. Five persons, or a less number, may be carried over a continuous line of roads upon a single order for transportation, and this order may be exchanged at the starting point for tickets over the entire route.

6th. Settlement should not be made nor vouchers given to railroads on orders for passenger transportation properly belonging to other roads, but the *passenger* accounts for each road should be made up separately in the name of the roads to which they belong.

7th. Appletons' Railway Guide for January, 1865, will be used as a standard for indicating routes and fixing distances, unless the actual distance is proved to be less, in which case settlement will be made on the basis of actual distance. Where this Guide cannot be more readily procured it can be furnished from this office.

8th. When a number of troops are to be transported from any point to any other point, on the same day or train, it should be done in squads as far as practicable. A single transportation order, or set of orders, should be given to the ranking officer, or most responsible person of the several detachments.

9th. Blank books of Free Transportation Orders will also be furnished, to be used on boats belonging to, or in the service of, the Quartermaster's Department, or on railroads operated by the Government. The free passes in these books will be given to persons entitled to receive Government transportation, and should not be issued without designating on the order the boat or road on or over which the person is to be transported. The marginal registers in these books will also be preserved for return to the Department Quartermaster, or to this office, as may from time to time be required.

Should the route to be traveled be in part over roads or on those owned by private parties or companies, care should be taken that Free and Pay Orders are given as the case may require, or such requisitions furnished as will enable the party entitled to transportation to procure it at points where pay transportation commences.

10th. To warrant the granting of transportation, except in cases specified by Regulations or General Orders, published for general information, the person demanding the same should show a requisition or order from competent authority requiring the movement by public conveyance in the performance of public duty.

The original requisition, when not necessarily required by the officer presenting it, should be retained by the officer furnishing the transportation; in other cases, a certified copy or necessary extract from the order should be furnished to, and preserved by, the officer granting transportation as his proper authority therefor, and a certified copy of the same must be endorsed on the back of the order.

11th. When the cost of transportation is to be reimbursed to the Government, as in the case of sick and furloughed soldiers, the required certificate should not only be made upon the furlough or order, but the transportation order should also be endorsed on the back substantially as follow: "The within transportation, furnished under General Order ——, and the proper officers duly notified. ——, A. Q. M."

12th. When transportation is granted to persons not in the military service, full explanations therefor should be given

13th. Orders for transportation should give the name of the party to be transported, or if there are several, then of the officer or person in charge, and state the number of men to be transported.

Orders for "one man," "ten men," and the like, without designating any name, are improper

14th. The receipts for transportation should be filled up in ink by the officer or person named in the order before signing, and if he cannot write his name, there should be a witness to his mark.

Names and places should be written distinctly in full, and not abbreviated.

15th. Duplicates of orders for passenger transportation should not be issued.

16th. When a requisition calls for transportation to any given point and return, the order should be issued to the place of destination, and the return transportation should be obtained at that point, provided it can there be procured.

17th. Upon the form of order now issued should be presented all the facts necessary to enable an auditing officer to decide as to the regularity or propriety of the order, so that it may be paid by any authorized disbursing officer.

18th. Erasures, interlineations, or alterations, if made against the interest of the Government, should be explained on the order by the issuing or other competent officer; otherwise, the transportation should only be settled for in accordance with the order before change or modification.

19th. Transportation by water being generally the cheapest should be selected when consistent with the interests of the service. All transportation should be furnished by the shortest practicable route, unless a different route is indicated in the order which directs the movement. Where there are two or more competing routes without material difference in distance or time, the business should be divided in equitable proportion between them, the distance for which compensation is made being estimated by the shortest practicable route.

20th. In no case is subsistence furnished by the Quartermaster's Department.

21st. The good of the service requiring that railroads should obey the requisitions of officers properly authorized to demand transportation, in case compensation is made by the Government for illegal or unauthorized transportation so required, the officer making the requisition or issuing the order will be charged therewith, or if not paid by the Government, the railroad will be entitled to recourse upon such officer.

By order of the Quartermaster-General.

LEWIS B. PARSONS.
*Colonel, and Chief of Rail and River Transportation.*


# The Old And Reliable Route.

**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

## MONDAY MORNING, MAY 8,
THE
# Atlantic & Great Western Railway

WILL COMMENCE RUNNING ONE THROUGH TRAIN between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at 8:00 A. M; arrive 8:10 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

# *STEAMSHIP COMPANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS, between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | | |
|---|---|---|
| WASHINGTON | 3,404 tuns, | 900 horse-power. |
| LAFAYETTE | 3,204 tuns, | 900 horse-power. |
| EUROPE | 3,254 tuns, | 900 horse power. |
| FRANCE | (afloat), | 900 horse power. |
| NAPOLEON III | (afloat), | 11,00 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table-wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its exuivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building) | 3,412 | —— |
| ENGLAND (now building) | 3,430 | —— |
| SCOTLAND (now building) | 3,430 | —— |
| ERIN | 3,310 | Grace. |
| HELVETIA | 3,315 | Prowse. |
| PENNSYLVANIA | 2,872 | Grogan. |
| VIRGINIA | 2,872 | Lewis. |
| LOUISIANA | 2,166 | Axplett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to
WILLIAMS & GUION, No. 71 Wall street.

For steerage passage apply to
640* WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). —The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN | $90 00 | STEERAGE | $30 00 |
| First Cabin to London | 95 00 | Steerage to London | 34 00 |
| First Cabin to Paris | 105 00 | Steerage to Paris | 40 00 |
| First Cabin to Hamburg | 100 00 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR..... 2,595 65-95 tuns.
WISLIAM R. BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge.

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
640* JAMES A. RAYNOR, No. 10 Barclay street.

# CENTRAL RAILROAD
—OF—
# NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,
Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 525 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m.; 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a.m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:30 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

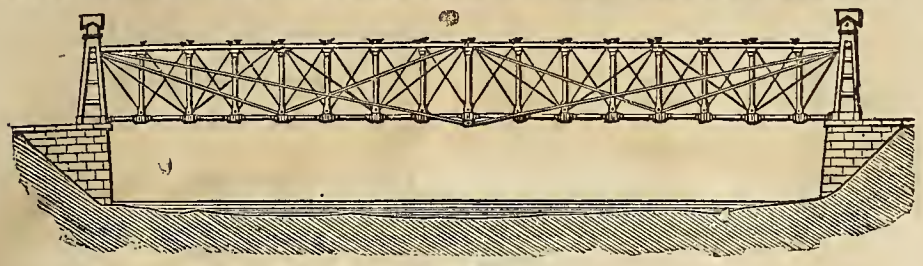
JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, als connecting with the North and West, leave Twenty-Sixth street Depot at 10 a. m., and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '63. 1y. Letter Box, 1362. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible] Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27,1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

*Philadelphia, Pa.*

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive En-

419 y [illegible]

---

## KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS.

PHILADELPHIA.

---

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

## FINDINGS

—AND—

## MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

Either Single or Double Plate,

With or Without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

MACHINE SHOP

SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

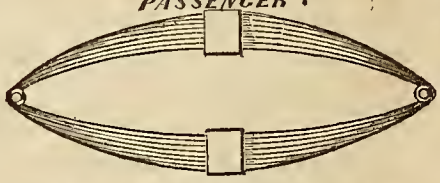
RAILWAY SPRINGS.

**FREIGHT**

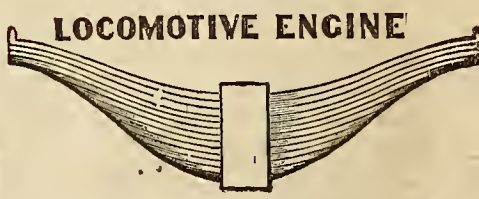




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

## STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerons points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe. than the cost by ony other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHING. TON CITY.

W. P. SMITH. *Master Transportation. Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express..... | 6 00 A. M. | 7 30 P. M. |
| Mail and Express..... | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation..... | 4 00 P. M. | 11 30 A M. |
| Morrow Accommodation..... | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express..... | 10 30 P. M. | 10 05 A. M. |

☞Sle ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail..... | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo..... | 7 00 A. M. | 9 45 P. M |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation..... | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Hunts-ville..... | 3 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation..... | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Tickct Agent.

Sbuses call for passengers.

## SUNDAY, NOVEMBER 13, 1864.

**Cincinnati to St. Louis without Change of Cars.**

# OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis. Cairo, St. Joseph Jefferson City and all Western Citiel.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St, Louis and Cairo Mail..... | Depart. 6:50 A. M | Arrive. 1:00 A. M. |
| St. Louis and Cairo Accommodation..... | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express..... | 8:00 P. M. | 8:00 A. M. |

Two trains Saturday. Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M. & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

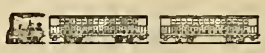
☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
General Ticke Agent.

W I. GRISWOLD nera' Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis. at which place unites with Railroads for and from all points in the West and North-west.

# SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago n advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:20 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for ticketsvia Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtaine at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner. and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train. and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD. President.
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, Cincinnati Agent.

# MOSELEY'S

**WROUGHT IRON**

# ARCH BRIDGES

—AND—

# Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES. constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2 MOSELEY & CO.

BOSTON, MASS.

# EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

# CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

# FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Bailroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

## THE SCHENECTADY

# LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State. possess superior facili es for forwarding the r work to any part of the country. without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

# PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**



# FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2 30 P. M.; 11 30 P M night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East a Wes

WM. TEARNE Supt

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. - - - } Editors

CINCINNATI:

THURSDAY, JUNE 29, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 25 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 8:15 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| *Atlantic & Great Western—* | | |
| | 8:00 A. M. | 8:40 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 4:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:45 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond, Chicago and Indianapolis | 7:00 A. M. | 9:45 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 10:20 A. M. |
| Richmond and Chicago | 7:00 P. M. | 12:45 P. M. |
| Hamilton Accommodation | 11:30 P. M | 6:45 A. M. |
| do do | 7:00 A. M. | 8:05 A. M. |
| Dayton Accommodation | 2:20 P. M. | 9:45 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Chicago and St. Louis Express | 7:00 A. M. | 12:00 M. |
| Springfield and St. Joe Express | 1:00 P. M. | 5:30 P. M. |
| St. Louis and Chicago Express | 4:00 P. M. | 2:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 4:50 P. M. | 8:35 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:40 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 6:50 A. M. | 1:00 P. M. |
| Seymour Accommodation | 3:45 P. M. | 5:00 A. M. |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 7:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 8.00 A. M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:55 A. M. |
| Evening Express | 1:35 P. M. | 6:00 P. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## NINTH ANNUAL REPORT OF THE LITTLE MIAMI R. R. COMPANY.

We have here before us the full report of the Little Miami and Columbus & X. R. R. Co. reeently printed. As this is one of the most interesting, as well as most prosperous roads in the country, we shall make a brief analysis of the main particulars, and compare it with the results of some former years. This is one of the roads on which the war has had a most favorable effect. A great deal of traffic, both in freights and persons, which had previously gone South, was by the war thrown to the North, and particularly on the direct lines from Cincinnati to New York and Philadelphia. The President, WILLIAM H. CLEMENT, Esq., gives the following view of the financial movements of the road. We have given the totals previously, but use the details now for the purpose of comparison.

The gross earnings for the year of the Little Miami and Columbus & Xenia, incluniug the Dayton, Xenia & Belpre, were as follows:

| | |
|---|---|
| Passenger earnings | $1,337,932 10 |
| Freight earnings | 1,031,965 09 |
| Express and mail earnings | 121,027 97 |
| Rent of track and depots | 62,337 46 |
| Total | $2,554,312 62 |

Less amouuts paid to other companies under coutracts for division of earnings, viz.:

| | |
|---|---|
| To Cincinnati, Ham. & Dayton R. R. Company | $107,695 95 |
| Cleveland, Columbus & Ciuciunati R. R. Company | $107,695 95 |
| Columbus & Indianapolis Ceutral R. R. Company | 9,466 57 |
| | $123,758 59 |
| Total earnings after division, | $1,430,554 03 |
| Add amouut received from Cin. Ham. & Dayton R. R. Co. as our proportion of their mileage earnings for the year ending March 31, 1864 | 2,732 58 |
| Total | $2,433,286 61 |

The general expense account is as follows:

| | |
|---|---|
| Transportation expense | $595,551 92 |
| Car expense | 145,576 23 |
| Locomotive expense | 124,334 09 |
| Road expense | 324,636 39 |
| General expense | 65,410 78 |
| Loss and damage | 43,420 39 |
| Total working expenses | $1,309,039 80 |
| Interest | 96,047 11 |
| Taxes | 89,083 55 |
| Dayton and Xenia lease | 10,153 87 |
| Springfield, Mt. Vernon and Pittsburg Int., allowed under contract with tha C. C. & C. | 7,000 00 |
| Total expenses | $1,511,324 33 |
| Net earnings | $921,962 28 |

These earnings have required the full capacity of the whole equipment of the companies; and the necessities of business and the interest of the Companies have demauded for some months, during the year, a concentration of nearly the whole equipmeut on the line.

In order to see the business and financial movement of the road we make the fallowiug comparisons. The two roads, (L. M. & C. & X.) being now united in the above report, we also add the receipts of both roads for the former years:

| | 1854. | 1858. | 1863. | 1864. |
|---|---|---|---|---|
| Total receipts, | $1,021,817 | $1,200,499 | $2,005,649 | $2,554,312 |
| " expenses, | 516,686 | 589,394 | 1,013 514 | 1,511,324 |
| Net profits | $564,141 | $611,105 | $992108 | $921,962 |

It appears from this, that the total receipts of the road have doubled in six years, and the net proffts advanced 50 per cent. in the same time. We may learn from this about what proportion of gaiu may be expected from a given increase of business. It may be remarked, however, that the expenses of 1864 were *pro rata* much larger than they have been in any given year. Up to the year 1864, the expenses have varied but little from 50 per cent. of the receipts. This year *they* are nearly 52 per cent; but will, no douht, relatively diminish in future years.

That we may show the increase of the passenger traffic, and the general increase of business, we add the following brief table of passengers carried over the Miami Road:

| | Passengers. | |
|---|---|---|
| In 1844 | 21,286 | L. M. Road. |
| " 1845 | 87,555 | " |
| " 1850 | 144,486 | " |
| " 1852 | 212,687 | " |
| " 1853 | 476,128 | over both roads. |
| " 1854 | 509,744 | " " |
| " 1864 | 773,024 | " " |

From 1844 to 1848 (4 years) Incr. 315 per cent.
" 1850 to 1854 " " 140 "
" 1854 to 1864 (10 years) " 55 "

The passenger traffic, notwithstanding the loss of any transportation, will coutiuue slowly to increase with the iucrease of population. The return of peace and more general business will increase the population of the towns of the Miami Valley, and throw more local passengers on the road.

The number of passengers arriving and departing from the *interior stations* (local passengers of the road) were, at the more important points, as follows:

| | |
|---|---|
| Milford | 7,049 |
| Loveland, (Junc. of Marietta Road) | 12,293 |
| Deerfield, (Lebanon Station) | 9,652 |
| Morrow, (Junc. of Wilmington Road) | 21,346 |
| Xenia | 44,063 |

The total *cost* of this line was as follows:

| | |
|---|---|
| Cost of Little Miami Railroad | $4,126,278 |
| " Columbus & Xenia " | 1,714,221 |
| Aggregate cost of both roads | $5,840,499 |

After paying the interest on such debts, yielded on two roads, together with interest, &c., &c., the following results were obtained.

| | |
|---|---|
| 20 per cent. stock dividend, January, 1864 | $817,605 |
| 5 per cent. cash dividend, and Government tax, May 1864 | 248,558 |
| 5 per cent. cash dividend, and Government tax, November 1864 | 253,791 |
| Dividends | $6,319,954 |
| Undivided surplus | 504,145 |
| Agg'te profits and surplus in 1864, | $6,824,102 |

As the stock is above par, there was really 30 per cent. cash dividend made in 1864. It will be seen also that the whole aggregate of

profits exceeded 30 per cent. of the aggregate cost of both roads. *The actual net profit made in* 1864, *on the aggregate cost of both roads was* 16 *per cent.* But, since near two millions of that cost was in the form of debt at 6 per cent., the actual profit to the stockholders was 20 per cent.

This exhibit shows the railroad from Cincinnati to Columbus to be not only profitable and well managed, but exceedingly profitable to its proprietors! No road in the country has more able, intelligent, and courteous managers than those who have now for several years been connected with this great line from Cincinnati to Columbus.

## CINCINNATI IN THE BEGINNING OF A NEW ERA.

The termination of the war and the beginning of a new era of commercial prosperity will probably produce as great an effect on Cincinnati as upon any place in the country. The peculiar feature of Cincinnati is, that it is *central* to the whole country, and therefore its trade, industry, growth and improvements must depend mainly on internal commerce. It is not on the ocean circumferenee; it is not on the lake border; it is not on the gulf. It is on the central arm of the Mississippi, which gives it commercial communication, by steamboats, with every part of the great Mississippi valley, even were there no railroads. But when railroads came they became radial lines, which communicated with all the exterior border. It follows, from this geographical fact, that the principal business of Cincinnati will be (1) to gather in the products of the central region, and send them to regions where they were needed, in exchange for articles not produced here; and (2) to manufacture for both this central region and for these Western and South States and territories, which could not manufacture to so much advantage. In other words, the trade and industry of Cincinnati are almost entirely domestic. If New York, whose trade is mostly with foreign countries, had been burnt up, it would not have materally affected Cincinnati. But the derangement or reduction of internal commerce would necessarily injure the business of Cincinnati. This was the precise effect of the war. The war was internal. It was internal trade that was greatly reduced, at least in regard to the border towns. On the other hand, Cincinnati was in a condition to supply nearly all the products which the government needed for the army. Hence, the employment of a great many people to fulfill Government contracts counterbalanced, in some degree, the reduction of industry and trade occasioned by the war. This business, however, is artificial and unnatural. Cincinnati will now return to its natural and legitimate channels of trade, with new and extraordinary facilities for industry and commerce. What these are we shall be able to examine more fairly *what the city is now;* and then looking at its prospective advantages.

1. *As to population.* Up to 1860 the progress of population has been as follows, viz:

| | | Gain. | |
|---|---|---|---|
| Population in 1820..... | 9,602 | 160 | per cent. |
| " " 1830..... | 24,831 | 87 | " |
| " " 1840..... | 46,338 | 149 | " |
| " " 1850..... | 115,438 | 149 | " |
| " " 1860..... | 161,044 | 40 | " |

The rapid falling off in the ratio of growth from 1850 to 1860 was in part caused by the *overflow* across the river and to the suburbs. There is only one accurate mode of determining the population of cities, and that is by taking all the population of the surrounding vicinage—say within ten mile, as New York Philadelphia and St. Louis do, and comparing the growth of this population doing business in one place from period to period. The real civic population doing business at Cincinnati, in 1860, was as follows, viz:

| | |
|---|---|
| Cincinnati, as above | 161,044 |
| Covington | 13,000 |
| Newport | 10,000 |
| Millcreek, Spencer, Storrs and Delhi townships | 22,000 |
| Aggregate population in 1860 | 206,044 |

If we suppose the increase of population in the last five years to have been only 3 per cent annually since July 1, 1860, the *aggregate* population July 1, 1865, will be 236,944. Of this Cincinnati within the limits will be 185,194; Cincinnati suburbs, 51,750; Hamilton County (which contains Cincinnati) had in 1860, 216,000; now it probably contains 250,000. The progress of building in the county (five sixths of which is in the city) we know exactly. It is returned by the Commissioner of Statistics as follows:

| | |
|---|---|
| In the year 1860, '2 '3 and '4 | 2,166 |

This indicates an increase of 16,000.

But it must be remembered that the *density* of population is much greater than in 1860. Every room in the city is occupied, and there can scarcely be a doubt that population is fully as great as we have stated. The following table shows the grain trade of Cincinnati for eighteen years, except barley, in which the increase is large:

*Receipts of flour and grain at Cincinnati for eighteen years.*

(Compiled from statistics of Cin. Chamber of Commerce.)

| Years. | Flour, barrels. | Wheat, bushels. | Corn, bushels. | Oats, bushels. |
|---|---|---|---|---|
| 1846..... | 202,319 | 435,486 | 57,245 | 106,852 |
| 1847..... | 512,506 | 590,804 | 896,257 | 372,127 |
| 1848..... | 151,513 | 570,813 | 361,315 | 194,557 |
| 1849..... | 447,844 | 385,358 | 344,810 | 185,723 |
| 1850..... | 231,859 | 392,699 | 619,227 | 191,021 |
| 1851..... | 482,772 | 368,600 | 489,195 | 164,238 |
| 1852..... | 511,642 | 377,038 | 653,788 | 197,868 |
| 1853..... | 449,689 | 343,649 | 723,334 | 283,241 |
| 1854..... | 426,464 | 408,084 | 745,455 | 427,423 |
| 1855..... | 342,772 | 437,412 | 845,597 | 400,178 |
| 1856..... | 546,727 | 1,069,468 | 978,511 | 403,920 |
| 1857..... | 485,089 | 737,753 | 1,673,363 | 534,372 |
| 1858..... | 633,318 | 1,211,543 | 1,090,236 | 698,950 |
| 1859..... | 558,173 | 1,274,685 | 1,139,022 | 557,701 |
| 1860..... | 517,229 | 1,057,118 | 1,316,208 | 894,515 |
| 1861..... | 490,619 | 1,129,007 | 1,340,690 | 838,451 |
| 1862..... | 588,215 | 2,174,924 | 1,780,292 | 1,338,950 |
| 1863..... | 619,710 | 1,741,491 | 1,504,439 | 1,312,000 |

The increase of the trade is 400 per cent in this time, and 33 per cent. in the last four years This increase of the grain trade is representative of the entire mass of imports and exports; which even during the war have very largely increased.

In regard to *manufactures*, the improvement is not so great. In the first two years of the war there was a diminution of manufactures; but now the difference is made up, and the value of manufactures is greater than at the beginning of the war. It is here that Cincinnati will gain rapidly by the advent of peace. It is naturally well adapted to manufactures; and its central position gives it great advantages in the distribution. As the valley of the Mississippi, in the South, is restored to industry and trade, it will demand tools, machinery, furniture, merchandise, which no point in the valley can furnish so well and so profitably as Cincinnati. This was the case before the war, and it will be so, in a far greater proportion, in the new revival of trade.

In this article we have given some outline of what Cincinnati is now; and we shall preserve the subject by discussing its future needs and prospects.

## RAILROADS BETWEEN NEW ENGLAND AND THE WEST.

The following article, from the *N. Y. Stockholder*, is well enough for the purpose of showing the advantages of, and what is needed for, a Boston line west—latitudinally: but it does not show what will eventually be the great Boston line west; which is *via* the New York and Erie Road. The completion of the great Broad Gauge route from New York to St. Louis—1,200 miles in length—will make a great difference in all the lines north of Philadelphia. It makes a grand artery through the country, and is central to the great interior West. The great route, from Boston to the interior west, will be a line formed by what is called the Norfolk Road to the junction with the Providence and Fishkill Road, thence to Fishkill, where the junction will be made with the New York and Erie Railroad at Newburg. This line is nearly complete, except about fifty miles from Waterbury to Fishkill, which is now in progress. When complete, no doubt the whole will be made of uniform gauge and continuous rail, and will be the best route from Boston to the west.

The great latitudinal railroad line is the expression used "Down East" to designate a line of railroads in the same parallel of latitude, from Plymouth Rock, in Massachusetts, to Chicago, Illinois—for both places are on the same parallel. The route of the Great Western, New York Central, etc., is not far from this line. It is regarded as occupying the only gateway through the Apalachian Mountains, except the comparatively unimportant one by Lake Champlain. All the other roads connected and to connect the

East and West necessarily encounter numerous comparatively high grades and many curves, making their distance practically greater than the level route through Central New York. Regarding this as a fundamental idea in the developments of the future, the Boston *Post* thinks that when this splendid line of connecting roads between the Atlantic ocean and the great river shall be brought to perfection, it will develop for itself a traffic between New England and the West far beyond any thing yet realized.

To attain this result, four conditions have long been felt to be indispensable, and it says, we are glad to know these are now in process of being met. (1.) The Worcester Railroad, terminating in this city, has not had access to the deepest water and the most extensive wharves in our harbor. It has therefore been at a disadvantage in transporting Western produce intended for exportation. It proposes now to connect with the Grand Junction wharves at East-Boston, as the Northern and Eastern roads already do; and when this connection is made, it will have as fine a waterfront as any railroad line in the United States, and will furnish unsurpassed facilities for the shipment of flour and grain to Europe. (2.) Proceeding westward, the transshipment at Albany has always been a serious embarrassment to freight from the West for New-England markets and seaports, as well as for merchandise going in the other direction. This difficulty, also, will soon be remedied by the Hudson River Railroad bridge, now in course of construction, and to be completed during the coming autumn. Cars will then pass without change from Boston via Albany, Buffalo, Toledo, and Chicago, to the Mississippi. (3.) Turning our attention still westwardly, we notice the break in the gauge at Suspension Bridge, where the Great Western Railway of Canada meets the New York Central Railroad. There is a discrepancy of nine and a half inches in the width of the two roads, and to overcome this, a third rail has been proposed on the Great Western Line. We hope no time will be lost in laying this rail, which the completion of the bridge at Albany will render more than ever a necessity. To relieve the pressure of freight on the New York Central, which in the future will increase rather than diminish, the road through Canada, as well as that on the southern shore of Lake Erie, should be able to exchange freight trains with it without breaking bulk. The terrible delays at Suspension Bridge last spring, which caused such heavy losses to shippers, would have been almost entirely prevented had there been no break there in the gauge. It becomes all who are concerned in this matter to suffer no time to elapse until this evil also is removed. At the western terminus of the Great Western, a suitable steamer with the track laid upon its deck will soon be ready, and will, in effect, bridge the St. Clair between Windsor and Detroit. (4.) Our railroad friends will pardon us for one more suggestion, which relates to the general management of the freight transportation on long routes. An able official said in our hearing the other day, at Albany, that the business of carrying freight on railroads in this country is still in its infancy. Our system, as all will admit, is susceptible of much improvement; altogether too much time is consumed in moving merchandise, and the uncertainty is often more vexatious than the delay itself. It is not for us to point out the specific remedy; continuous rail and conformity in gauge will accomplish much. Those who have these great transportation interests in charge are, however, fully capable of overcoming difficulties still existing, as they have shown themselves to be in reference to those obviated in the past. We desire only to say that a merchant should be able to calculate as closely upon the arrival at a given point, be it near or remote, of property intrusted by him to the railroad freight train, as upon his own arrival at his place of destination, when he takes his seat in the railway carriage. When this shall be attained, New England and the West will be nearer together than ever before.

## PETROLEUM AND PETROLEUM COMPANIES.

There having been at least one thousand oil companies formed, it followed, of course, that many of them must fail of profits, and when that came, as it has come, oil stocks would be dull. But it does not follow from this that oil will give out, or that there will not be found new supplies, and the business go on with renewed force. Too much petroleum has been found in too many places not to show that it is a permanent element in the earth. The only question is, how to get at it? In this respect, it is just like gold. It is sometimes difficult to find, and will often be difficult to work.

The New York *Commercial Advertiser* gives the following interesting particulars as to the capital in petroleum: The amount of capital stock issued by the respective companies varies from $5,000 to $10,000,000. At the close of March, the amount of par capital of companies in the several cities where the trade has centered, was as follows:

| | No. Companies. | Am't par Capital. |
|---|---|---|
| Philadelphia | 436 | $230,885,000 |
| New York | 220 | 214,400,000 |
| Pittsburgh | 91 | 22,930,000 |
| Boston | ... | 3,000,000 |
| Baltimore | ... | 2,000,000 |
| Chicago | ... | 5,250,000 |
| Detroit, Mich. | ... | 500,000 |
| Erie, Pa. | 4 | 1,500,000 |
| Titusville, Pa. | 3 | 4,750,000 |
| Washington, D. C. | 2 | 700,000 |
| Indiana | 7 | 1,780,000 |
| Kentucky | 61 | 24,000,000 |
| Ohio | 103 | 23,373,500 |
| Places not enumerated | ... | 7,500,000 |
| Ninety-two Companies in New York, Philadelphia and Pittsburgh, whose capital is not published, estimated at | ... | 36,000,000 |
| Total | | $580,568,500 |

It thus appears that at the close of March there were companies organized in the United States, the combined par capital of which amounted to over $580,000,000. At the present time the aggregate stands, no doubt, at fully $600,000,000.

The *Shreveport Gazette* of the 9th, says cotton was selling there at 10 cents for specie and 15 cents for greenbacks. It also states that there are large amounts of cotton on Red River.

## THE ATLANTIC CABLE.

What the Cable is made of, and How and When it Will be Laid.—The present Atlantic cable is just twenty-three hundred nautical miles, or in rough numbers about twenty-six hundred miles long. The central conductor is composed of seven fine copper wires, twisted into one complete strand, which is insulated with Chatterton's patent compound. Outside this come four distinct layers of gutta percha, each also insulated with the same material that encloses the conductor. Outside the gutta percha again are wound eleven stout iron wires, each of which, before being twisted on, is itself carefully wound round with strands of hemp, soaked with tar. Thus, then, there are no less than twenty-five thousand miles of copper wire in the conductor, about thirty-five thousand miles of iron wire in the outside covering, and upwards of four hundred thousand miles of strands of hemp—more than enough in all to go twenty-four times round the world. The cable has been made on an average at the rate of seventeen miles per day complete, and in some days its outside covering of hemp and iron has been overlaid at the rate of one hundred and seventy-three miles a day, though not a fathom or a foot has been manufactured without every part being kept under constant test for "conductivity" and insulation, and to this hour it is as regularly tested as it was a year ago, when the first mile was twisted. In strength the cable is equal to bearing a strain of seven and three-quarters tons, while its specific gravity is so low that it can with safety be depended on to support eleven miles of its length in water. It has been made mile by mile, joined up in long lengths of seven and eight hundred miles, and shipped on board the Great Eastern into three enormous tanks.

The first will hold a coil of six hundred and thirty miles of cable, the second one of eight hundred and forty, and the third one of eight hundred and thirty. Five hundred miles have still to be stowed away on board, and it will take a fortnight to complete this work, though the last mile of the coil will come through the machines of the telegraph works at three o'clock on Monday next. All three tanks are kept filled with water, and when each is stored with cable as well, the ends of the wire will be joined up, and a constant system of signals kept through every part from the moment the expedition starts till the cable is laid. The mere cable, however, is but an item in the mass of heavy weights the Great Eastern will have to carry on this occasion. Her draught of water will be rather over than under thirty feet, and, all told, her weights, when starting from Valentia, will come near the stupendous mass of eighteen thousand tons. They are all, however, stowed high, and so, according to present arrangements, it is believed that the Great Eastern will start in the very early part of July, and certainly, if possible, not later than the 10th. With her will also sail her Majesty's ship Terrible and another paddle-wheel steam frigate of great power not yet chosen, but which, like the Terrible, will give towing aid to the Great Eastern in case of mishaps to her machinery, either screw or paddle. Every care has been taken to get these engines into the highest state of good working order; but it can not be denied that the very possibility of their breaking down is looked upon with something like anxiety. They will certainly not be overtasked, as it is intended, if possible, not to let the vessel go beyond a speed of six knots, a minimum of velocity which it will be difficult to keep to, if steerage way is wanted quickly and which will, we think, be found absolutely impossible to retain in a seaway. On this occasion, however, the middle of July is chosen

as being thought even more favorable in point of weather than the middle of June, when the last Agamemnon cruise was commenced. Captain Anderson, we believe, is in favor of starting towards the early part of July, and his long experience in command of the China has very properly induced the directors to give every weight to his opinion. In addition to Captain Anderson, all the officers connected with the ship, with the exception of the chief engineer, have been chosen from the Cunard service. With ordinarily fair weather, and steaming at the rate of six knots it is expected that the voyage from Valentia to the Bay of Hearts' Content in Newfoundland will occupy from twelve to fourteen days, during every hour of which regular communication will be kept up with England.—*London Times.*

## SOUTHERN RAILROADS--THEIR RECONSTRUCTION.

Of the 31,168.76 miles of railroads in operation in the United States at the commencement of the war in 1861, 8,783 82 belonged to the seceded States, distributed as follows:

| | Miles in operation. | Total No. of miles projected and in operation. | Cost of roads and equipments. |
|---|---|---|---|
| Virginia | 1,805 04 | 2,483.62 | $69,580 696 |
| North Carolina | 886.92 | 1,212.04 | 17,084,5 0 |
| South Carolina | 978 47 | 1,074.47 | 22,015.135 |
| Georgia | 1,401.50 | 1,724 20 | 27,632,690 |
| Florida | 326 50 | 736.50 | 6,561,000 |
| Alabama | 643.30 | 1,438.90 | 17,262,487 |
| Mississippi | 797.80 | 870.80 | 22,986,370 |
| Louisiana | 326.75 | 831.00 | 12,193,124 |
| Texas | 294 50 | 2,067.00 | 9,2 0,0 0 |
| Arkansas | 38 50 | 701.33 | 1,800,000 |
| Tennessee | 1,283.54 | 1,412 63 | 30,793,180 |
| Total | 8,783 92 | 15,152.49 | $237,139,4·2 |

As one State after another withdrew from the Union, the rebel authorities assumed partial control of their railroads in the name of the Confederacy, and ran them as "military roads." In this manner—the various routes being very nearly of the same gauge—they were enabled to transport troops rapidly from point to point, as often as threatened, and thereby baffle our herculean efforts to penetrate the shell of the Confederacy. The Southern military chieftains realized the importance and necessity of keeping their network of roads intact, and, with a keen foresight, early organized a Construction Corps to quickly repair the damages inflicted by Federal raids. They thus, for a long time, kept open the principal lines of communication, including among others, the Orange and Alexandria, Fredericksburg and Richmond, Weldon, Charleston and Savannah, Georgia Central, Mobile and Ohio, New Orleans and Great Northern, Memphis and Charleston, and Knoxville, Chattanooga and Atlanta. The shorter and unimportant roads were abandoned or left exposed, while these were strongly guarded and defended.

As the conflict progressed, however, and our authorities began to comprehend the situation better, they saw that it was necessary to break up and disconnect the South, as well as to defeat the Southern armies, in order to achieve the overthrow of the insurgents. A war against rebel communications was therefore inaugurated. Following the occupation of Nashville and the battle of Pittsburg Landing, Halleck and Grant destroyed the Memphis and Charleston road, running eastward from the first-named place through Corinth, Tuscumbia and Huntsville to Chattanooga. This having been effectually done, the enemy was cut off from intercourse with Southwestern Tennessee, while the Northern section of the Mobile and Ohio, and New Orleans, Jackson and Great Northern roads, which two intersected the Memphis and Charleston, were rendered useless. The occupation of New Orleans and Grant's subsequent sweep round to Jackson, in the rear of Vicksburg, about finished up the Great Northern road. The Mobile and Ohio, running from Mobile through Mendion, the enemy managed to keep open most of the time up to within a few miles of Corinth.

The next great railroad *coup de main* was executed in Eastern Tennessee when Rosencranz occupied Chattanooga and Burnside Knoxville, thus effectually severing the direct route for communication between the Eastern and Western rebel armies, via Lynchburg and Bristol. All attempts to regain that vital artery were unsuccessful, and the first really atal blow was inflicted upon the Confederacy. Davis from that time was compelled to hold communication with his Southwestern forces by the long and circuitous route through North and South Carolina.

Grant, who had now been placed in supreme command, next directed his subordinate, Sherman, to destroy the remaining route of intercourse by occupyiug Atlanta, and then render useless the Georgia Central Road and the West Point running to Montgomery. The reader is familiar with the result of that ever memorable campaign, which ended in the capture of the Gate City and the virtual subjugation of Georgia to the sea coast. The subsequent destruction of the North and South Carolina routes of Virginia by Sherman, Schofield, Terry and Sheridan, very materially hastened the coming of the end. Unable to longer transport troops rapidly to and fro; reduced in supplies by the burning and tearing up of their great "feeders," the enemy were eventually compelled to succumb.

We thus see that the Southern railroads have played an important part in the rebellion. So long as they were kept intact they were a powerful element of strength, but their net-work once destrayed, the whole fabric of the confederacy began to crumble.

No sooner was the overthrow of the insurgents accomplished, than our authorities at once set about the work of building up the thoroughfare which they had been for four years destroying; the Southerners co-operated zealously in this work, and many miles of track have been relaid and reopened, commencing with Virginia; the Orange and Alexandria, extending from Alexandria through Gordonsville and Charlottesville to Lynchburg, is being rapidly repaired at both ends, and will in a short time be in running order through the entire distance. The Virginia Central, running from Richmond through Gordonsville and thence on beyond Staunton, is likewise being rebuilt. The same is true of the Richmood, Fredericksburg and Potomac routes; at last accounts the workmen had reopened the road from Richmond well on towards Fredericksburg. The fifteen miles interveniug between the latter place and Aquia Creek will require considerable time to finish, owiog to the track having been completely taken up by Lee after Hooker's retreat in the summer of 1863. Once done, however, this will undoubtedly become, as it was prior to the war, the favorite thoroughfare of travel between Washington and Richmond.

Immediately following Lee's retreat this road was opened southward to Petersburg. The gap of a few miles made by our soldiers below Petersburg has not yet been restored. When this is done there will be complete rail communication from Richmond to Wilmington and Weldon Road having been rebuilt by our soldiers as they moved up northward to Goldsboro.

The Richmond and Danville Road is now in good running order. The remainder of this route, through Greensboro, Salisbury, Columbia, to Branchville, and thence to Augusta, will be rebuilt ere many weeks. After Sherman passed by, the Southerners immediately commenced relaying the track of the Georgia Central Road from Augusta to Atlanta. Their labors were completed some time since, and two trains now pass back and forth daily. We cannot learn that much progress is being made on the Georgia Road extending from Savannah through Millen and to Mason, so materially damaged by Sherman's troops. Neither is the route between Charleston and Savannah being rebuilt to any extent. Our troops at the former place are, however, relaying the road running from there to Branchville.

The great East Tennessee thoroughfare is being slowly rebuilt from Burksville Junction westward towards Lynchburg, and from Knoxville eastward towards Lynchburg. It has also been rebuilt from Cleveland as far as Dalton, in the direction of Atlanta. It will soon be completed to the latter city, and then there will be direct comunication frim Richmond to Montgomery; thence by water to Selma, and thence again by rail to Mobile.

The Memphis and Charleston Road has been rebuilt for a distance of over seventy miles eastward from Memphis. Repairs are likewise going rapidly forward on the Mobile and Ohio, and New Orleans and Great Northern Roads.

In a few months, therefore, we may expect to see nearly all the Southern thoroughfares re-established, and in good running order. This will aid materially in bringing the two sections together again, and in restoring the social and friendly relations formerly existing between them.—*Economist.*

## JOURNAL OF RAILROAD LAW.

### NO ONE LIABLE TO A RAILROAD COMPANY FOR PREVENTING THEM FROM BUILIDING A TRACK WHERE THEY HAVE NO RIGHT.

Railroad companies are not infrequently found laying their tracks upon land where they have really no right, under the supposition that they have it. This occurs sometimes from a misapprehension of the facts, and sometimes from erroneous impressions as to the law. In the case of the Bangor and Millford Railroad Company against Smith, the Supreme Court of Maine held that such attempts may be resisted by any person, without liability to the trespassers.

The plaintiffs in that case undertook to construct a branch track of their railroad across the public highway to Old town. The defendant, with others, denying the right of the plaintiffs to construct the branch track as claimed by them, interfered and prevented the laying down of the same. For this interference the plaintiffs have brought a special action on the case, setting forth their right to construct such branch track and the doings of the defendant, by which they were prevented from constructing it.

The plaintiffs introduced evidence to prove and the witnesses testified, that at the time alleged in the writ, the plaintiffs were proceeding under the direction of their president, to build or construct a branch track of their road over the land of Samuel Veazie, in Old town, with his consent, he being at the time president; that while so engaged on the land of said Veazie, this defendant, with a large number other men, resisted their further proceedings, and continued their opposition so long that they finally abandoned their work and never afterwards resumed it.

It also appears from plaintiffs' testimony that their intention at the time was to construct a track across the public highway on a corved line, such as this court, in this case have decided (407 Maine 34) they had no right to construct, that the only purpose of the persons so engaged was to extend the

track across the road, and the only object of the defendant and other citizens of Old town, was to resist the laying across the road; that no question was made at the time, whether they were on Veazie's land or not, and that plaintiffs object was not to build merely on Veazie's land to the street, unless the track could be carried across said street, which the defendant, as a citizen of Old town, resisted.

Notwithstanding the decision, the plaintiffs now claim damages for being prevented from building said road or constructing the track upon the said Veazie's land, although they had no right to continue it across the road, the track in such case being capable of being used as a side track.

The presiding judge being of opinion that the action could not be sustained to recover such damages, the case was taken from the jury and continued, on report, with the agreement that if the action can not be sustained, a new suit is to be entered, otherwise, the action should stand for trial.

The plaintiffs moved for leave to amend their writ, if, under the foregoing facts, any action can be sustained, so as to make it conform to their rights.

The opinion of the court was delivered by APPLETON, J as follows:

When this case was before under consideration, the court ruled that the plaintiffs, not having brought themselves within the provisions of the law could not legally construct the branch track in the way and manner proposed by them.

The branch track described in the plaintiffs' writ, and to which all the evidence relates, crosses the public highway. The branch is an unit. The plaintiffs were desirous of and had commenced building the track as a whole, the writ alleges no intention of building a part of the same. They were undertaking to build the branch track. They had no right to do so. Undertaking, what by law they were not authorized to do, and what, if done, would have been the proper subject for an indictment, they were prevented by the defendant from executing their unlawful purpose.

The action, then, is one in which the plaintiffs claim damages because they were prevented from doing an illegal act, and for which, if done, those engaged in its commission would have been criminally punishable. It is difficult to perceive how the prevention of an offense constitutes a cause of action on the part of the would-be offender, who is interfered with in the commission of his intended offence. It is still more difficult to understand how any damages can have been sustained by reason of such interference. But it is insisted that the defendant's interference took place before the plaintiffs reached the highway over which they were about laying their track. But this does not alter the case. The branch track would be utterly useless if it were not laid its whole length. The plaintiffs had no intention of laying it a part of the way. The grievance complained of is the not being permitted to lay the branch track, not an useless portion of the same. The defendant had no objection to the laying of part of the track so long as it did not interfere with the public highway; and the case shows that the building of the track across the highway was the sole matter in dispute.

The plaintiffs' writ, coupled with the facts admitted in the case, negatives the plaintiffs' right to recover. It alleges that the track in question was "legally and properly located and established by consent of the owner of the land over which it was so established and laid out, and fully confirmed and approved by the commissioners of Penobscot county, in a proper and legal manner." But it has been determined that the track in controversy has not been legally located and established, and that the plaintiffs had no legal right to construct the same as they proposed to do.

The claim for damages set forth in the second count is, that "by reason of such unlawful proceedings of the defendant as aforesaid, the plaintiffs have wholly lost all right and power to hold said road, and are therefore without right and power to finish said road, and to enjoy the benefits thereof; but on the contrary are daily ever since, and ever must be hereafter, subjected to great additional expense and trouble, as well as danger, to pass their cars and trains from the mills on their track, and thus to Bangor," &c. In the first count, the damages are set forth as having arisen from the defendant's "having prevented the plaintiffs' resuming and finishing said track untill the full time had expired within which the plaintiffs had right or authority to complete or construct said road," &c. The damages are alleged to follow from an interference by the defendant with the plaintiffs, in the enjoyment of certain rights, particularly that of building the branch track. But as the plaintiffs had no legal right to construct and complete the branch track, as they claimed to do, they can not have sustained any loss from that special cause, and having lost nothing, they have set forth no ground for awarding damages to them. * * *

The prevention of the doing an unlawful and unauthorized act does not, *per se*, constitute a good case of action on the part of the would-be and incipient wrongdoer, and that is the whole of plaintiffs' case.

The plaintiffs were therefore non-suited.

## MINERAL WEALTH OF WEST VIRGINIA—CONDITION OF THE IRON TRADE.

BY PROF. WM. F. ROBERTS.

The hills and valleys within the limits of the State of West Virginia, comprehend, geologically, the upper, middle and lower divisions of the carboniferous series of sandstones and shales, with which are interstratified the most useful and valuable kinds of mineral, such as coal—cannel and bituminous—equal in quality to the best of this class in any country; iron ores of the argillaceous, calcareous and silecious description, very abundant in quantity, and generally of greater per centage in metal than ores of this character are usually found to possess in other coal formations. In juxta position with the coal and iron ore, are firebrick and potter's clay, limestone and building stone, in strata of workable sizes, in the same hill, which may be advantageously and extensively mined without incurring any expense for draining machinery. The country presents superior inducements for smelting iron, and manufacturing it for all its varied requirements. West Virginia is generally characterized by geographical features of great simplicity. The surface, in some places, may be termed mountainous and rough, but, although this is the case, there is no evidence that the strata have been subject to violent upheaving forces. From the level of the valleys to the summit of the highest peak, the beds of the rocks and shales, and of their associate minerals, show a general gentle inclination or dip from the crest of the Allegheny chain of mountains towards the valley of the Ohio. The form, direction and character of the geological structure of the intermediate hills and valleys comprised within the State limits, show that the irregularities of surface have been produced by the continued action of water—violent at times it may have been, but always more or less constant in its denuding agency, scooping out, as it were, the shales and soft material of the carboniferous formation from beneath the beds of sandstone, which, by their superincumbent weight, break and topple over, and, from time to time, slide down from the rocky cliffs above into the valleys below, and give somewhat the appearance as having been subjected to violent upheaving forces, and hence attributed, by those who merely look at the effect without consulting the cause, to volcanic eruption To prove the fallacy of this theory, it is only necessary to examine the strata, which may easily be traced from hill to hill, from valley to summit, and we find that the same kind has its usual character and thickness at the same elevation with unchanged inclination to the horizon, and with comparative regularity in all cases and places.

South Wales never presented to the iron master so favorable a prospect for amassing wealth in blast furnace operations as West Virginia offers, and that country made a Crawshay an "iron king," who, with the wealth he acquired in its manufacture, has given material aid and comfort to the British nation when it was needed, and, moreover, has, to some extent, been our ruler, using as his sceptre the rod of iron. To him and his compeers in this business we have been compelled to pay tribute, and have belped to feed, clothe and sustain a vast population of their employees in a foreign land, while our far richer fields of minerals have lain untouched in the bosom of mother earth, as though nature, in her most bountiful beneficence, had placed them there to remain idle and worthless, uncalled for and uncared for. The iron trade of England has always had the fostering protection of that government, and it has become the bulwark of that nation—the vertebræ of her renown and power, through the influence of which the boasted strength and wealth of these United States have been subservient to her. How long these things may continue, depends solely upon the time when our rulers will give us the boon of progress, adequate and necessary protection to American industry and American manufacture.

The iron masters and others interested in the general and continued welfare of this country, have frequently and earnestly implored Congress to sustain them in their ardent and earnest endeavors to make the proper use of the unbounded mineral treasures which exist in great profusion in almost every State of the Union, and now, as in the time of Henry Clay, the great protectionist, they are busily engaged in preparing to submit to their representatives at Washington the necessity of a protective tariff, on iron especially, and all honest men—those who love their own country best—should give their support to accomplish, as early as possible, this very desirable and laudable undertaking. Those depending upon agriculture alone for subsistence, even in the far Western country—the merchant, the mechanic and the laborer, alike, would be greatly benefitted were we independent, as we ought to be, of other nations' products and other nations' manufactures. The greatest good to the greatest number should be the one idea of our people, and surely we should cultivate and cherish the naturally industrious habits of our own citi-

zens, rather than assist a foreign population, who have no desire to help us, but, on the other hand, use all the means in their power to cripple and retard the go-aheadative faculties which we as a nation are supposed to possess. With money abundant, and cheap in every city, town and village in all the Northern States—with peace throughout the land, and with the restoration of the Southern States, requiring extensive repairs and reconstruction of works damaged and destroyed during the war just closed—with an extensive system of railroads to be fixed up and supplied with machinery and rolling stock, and other works requiring large supplies of iron, one would naturally suppose that this business, at least, would be in a healthy and prosperous condition. But what do we see? The trade completely prostrated—furnaces out of blast everywhere—the wheels of railroad mills and of other iron manufacturing machinery stopped—and for what reason? Not for the want of hands, surely, for during the war every furnace, mill and factory in the country was in active operation; but the high price of provisions increased the value of labor, and this, coupled with the great duty imposed upon iron to pay the interest upon the debt incurred during the war, accounts for it. The charges per ton are very heavy, and in ordinary times would be considered a fair profit to the manufacturer, and they are more than equal to the tariff on imported iron. England, therefore, at the present time, can supply us with railroad iron, merchant bar and the like, at cheaper rates and pay the duty, than we can manufacture them for; and hence the iron masters of this country have equitable reasons for complaint, and just cause for claiming protection from our rulers. The low price of labor in Europe, in comparison with that in the United States, enables them to compete successfully with us in this branch of business particularly, and the result is that many thousands of our workmen are unemployed, and blast furnaces and rolling mills idle, and in addition to this our Government financially loses by the operation, in not receiving an immense revenue from this great staple manufacture of this country, in which millions of dollars are invested, and which should give a very large amount of circulation of our own funds in our own country, among the deserving, industrious population of this commonwealth.

As an illustration of this suicidal policy, the statement of a single fact may suffice, and by-the-bye, it is not an isolated circumstance. The same thing is known to exist in every place where iron is manufactured, in all parts of this country. The valley of the Lehigh is one of the very best situations in all respects for the manufacture of iron. It can be made there as cheap as it can be produced anywhere in this country. They have close at hand the best of anthracite for fuel, large deposits of hæmatite and rich magnetic ores of iron, and excellent limestone. Their furnaces are first-class, with the latest improvements attached, on the line of a superior built railroad and a large canal, and contiguous to the best of markets for the sale of their productions. In this valley, there are twenty-eight of the largest sized blast furnaces, only eight of which are now in operation. During the war they were all employed, and now there are twenty idle, and, in addition, the rolling mills, machine shops, foundries, &c., are several of them stopped. In a growing country like this, such a state of things should not exist—especially is this so when all that is required to obviate the difficulty is proper legislation on the subject.—*Petroleum Gazette.*

From the New York Tribune.

## A REVOLUTION IN MINING.

Gold and silver are very good things to have, provided they can be used; but Robinson Crusoe would have gladly swopped his lump of the yellow ore, a lump as big as his head, for its weight in tenpenny nails, simply because it was useless for his purposes. Gold and silver, whether in big lumps or little, add nothing to the wealth of a country, beyond a certain point, if to bring them into use costs more than they are worth. Our mineral wealth, enormous as it is, has these limits: first, that only a certain portion of it can be made available because of the cost of separating the precious metals from the ore; and, secondly, that a still larger portion is of no value, since they can not be separated at all. Any process which shall cheapen the extraction of gold and silver from their ores will add immensely to our national means, and if it can effectually unlock those that are now reached at all, a new source of wealth is opened to us of incalculable value. Dr. J. C. Ayer, the well known chemist of New England, has recently hit upon a method of disintegration and desulphurization of ores, which, if it does all that is promised of it, will make not only the fortune of those who are connected with him in the ownership of the patents, but add largely to the wealth of the nation itself. If this method shall prove successful we are about to witness a revolution in mining which will add to our national resources as to make not only the payment of the public debt an easy matter, but which will influence the commerce of the world.

It is claimed for this new process that it is effectual in the disintegration and desulphurization of rock and ores by the application of liquid or liquid solutions while in a heated state. The rock or ore is rendered soft and friable and may be easily reduced to powder, while the volatile metals are, at the same time, expelled and the base metals oxydized. This leaves the gold and silver free for amalgamation.

By the ordinary method of grinding and stamping rock, the gold therein contained is so comminuted, that a large portion of it eludes the mercury and is lost. However finely the rock be pulverized, it is found, under the microscope, to be merely split into pieces or chips of stone, each of which contains gold within itself, beyond the reach of mercury, and which is of course lost. In the one case the metal is lost because it is itself ground and reduced too fine to be obtained; in the other, because it is not released at all. No successful method of overcoming these difficulties has hitherto been discovered, and, consequently, under the system of extraction now in use, miners only get about one third of the gold therein contained.

Dr. Ayer's process appears to obviate these difficulties, for while it aggregates the precious metals into globules, by the natural action of heat, it destroys molecular adhesion of the integral particles of the stone, rendering it friable like chalk. It, in fact, disintegrates the rock into its atoms, so that it may be easily rubbed up into powder. So effectual is the atomic separation that flint glass, or the hardest quartz or agate is made to absorb water like a sponge. Hence it is claimed that ores, treated by it, yield nearly all the precious metals they contain (over 90 per cent.) for the usual means of extraction. The process not only destroys the rock without dividing the gold and silver, but also expels, by chemical action, any volatile metals, such as arsenic, antimony or bismuth, whose presence forbids amalgamation by mercury; while, if sulphurets are present, the oxygen of the decomposed water, used in the process, unites with the base metals, which remain as oxydes, and the sulphur, uniting with the hydrogen, goes off in clouds as sulphureted hydrogen. Hence mines that have been abandoned because they could not, although rich, be profitably worked, for any of the above reasons, may now afford a munificent return, and even the "tailings" of the working mines yield more gold than has hitherto been obtained from the mines themselves by the old method. Highly sulphureted ores are frequently among the richest that are found, but they have been nearly worthless, in consequence of the insuperable difficulties of extracting the metals from them. Now those difficulties appear to be wholly removed—difficulties which have locked within the rocks an untold amount of bullion. The great points gained, then, are:

1. The integral separation of stone into its atoms, which grinding, stamping or pulverizing, can but imperfectly accomplish.
2. Desulphurization of sulphureted rocks and ores, and their purification from contaminating metals.
3. Expulsion of the volatile metals.
4. Oxydization of the base metals and separation therefrom of the precious metals held in combination.

And, these points gained, it is estimated that the process will yield a working average, say, from eighty or ninety per cent. of the precious metals contained in any kind of rock or ore, and not less than twice as much as is obtained by any method now in use. But beside this there is an immense saving in the expense of mining, as the costly machinery and power for stamping are dispensed with, and the apparatus required is cheap, and may be built anywhere. The following estimate is made:

The average cost of stamping machinery at the mines is $1,000 per stamp. (One stamp can pulverize about one ton per day.)

| | |
|---|---|
| The average cost of machinery to stamp 100 tons per day | $100,000 |
| The average cost of furnaces to disintegrate and desulphurize 100 tons per day | 20,000 |
| Saving by this process of capital invested for 100 tons per day | $80,000 |
| Assuming that 100 tons of ore are worked daily, containing $100 per ton, they would yield by the stamp process, say 30 per cent | 3,000 |
| The same amount by this process, say 80 per cent | 8,000 |
| Daily difference in favor of this process | 5,000 |

Thus, on an amount of 100 tons per day, there is not only the saving of $80,000 in the first investment, but also a daily saving of $5,000 in the yield.

The results arrived at so far have been attained through a course of careful experiments upon considerable quantities of rock, and to the perfect success of these Dr. Hayes, the State Assayer and Mineralogist of Massachusetts, Professor Silliman, of Yale College, and Professor Torrey, U. S. Assayer of the Mint in this city, testify in the most unqualified manner. Whether the same results will be reached by practical application of the process on a larger scale at the mines, remains, of course, to be seen. So great is the confidence felt in it, however, among capitalists and practical men, that a company has been formed in this city, under the title of the "Chemical Gold and Silver Ore Reducing

Company," of which Major Gen. Butler is President, and other substantial men Trustees.

At their office, No. 64 Broadway, they offer their discovery to the public, and their stock and royalties for sale.

The subject is attracting, we understand, a good deal of attention among those interested in mining. Its importance can hardly be over estimated, if no unforseen obstacle shall be developed in the practical operations of the process.

If this invention can accomplish what appears to be fairly claimed for it, viz: that it more than doubles the yield of the precious metals from ores, at a reduced cost of extraction, then it is not a wild prediction that within five years our mining interests will have so extended and developed themselves that this increase alone upon their product will pay the interest of our national debt. By one of the singular coincidences which seem to pertinent for chance. Petroleum came in when cotton failed to balance or exchanges with the world; and may we not reverently believe that the unlocking of the exhaustless treasures which our rocks contain, when we are called to pay the immense cost of eradicating our great national sin, is the timely gift of an overruling Providence. Surely our history is showing that, with nations as individuals,

> "There's a Divinity that shapes our ends,
> Rough hew them as we will"

## THE CENTRAL ARGENTIFEROUS REGION OF NEVADA.

By the treaty of Guadalupe Hidialgo between the United States and Mexico, the territory comprising the present States of California and Nevada, with the Territories of Utah and New-Mexico, were ceded by the latter to the former government. The object then in view was the acquisition of the valuable ports on the Pacific coast, and the intervening belt of land to make it continuous to the possessions on the west of the Mississippi. The discovery of gold in California soon attracted thither a large population, and as early as 1850 a State was carved out of the newly acquired domain whose eastern boundary was a line nearly parallel with the snowy peaks of Sierra Nevada, distant about two hundred miles from the sea-coast.

The cañons and gulches of these mountain-heights were explored in search of gold, and in 1858, parties who had crossed the summit were engaged in washing gold in the ravine on the eastern slope, when the metaliferous quartz ledge in Virginia was discovered, and located for its value in gold, only as indicated in the croppings. Soon, however, it was apparent that gold only existed in the croppings, and the great value of this metaliferous lode, known as the Comstock, was its silver ore. Than began the era of silver mining in the United States. The Mexican, Ophir, Gould & Curry, Savage, and other locations, were made on the Comstock lode, and valuable claims were located on Gold Hill, immediately adjoining, but lower down in the ravine. The immense value of a silver bearing quartz-ledge, on account of its continuous and uniform yield, attracted the attention of explorers and capitalists. Soon after the development of the riches of the Comstock, the Esmeralda district was discovered, which lies south of the Comstock about one hundred and twenty miles, and many valuable claims were located, and Aurora soon became a populous town. The eastern slope of the Sierras, created by its inhabitants, the immediate wants requiring trade and commerce, and the mountain passes were soon converted into established roads and highways. The most frequented was that which passed through Placerville to Lake Tahoe, on the boundary-line between California and Utah Territory, to Genoa, Carson, and to the ravine at the head of which lay the celebrated Comstock ledge. Virginia, a large city, was built at this point; adjoining it the town of Gold Hill; next, Silver City; then John Vonn and Dayton; making in that ravine, from Virginia to Dayton, on the Carson River, a continuous settlement of about four miles long, and now containing about twenty thousand inhabitants, and nearly two hundred quartz million, employed in reducing the rock to bullion.

Private enterprise established a pony exchange across the continent, in anticipation of the continental telegraph, and on a removal of the overland mail from its southern route, the pony route was adopted. It went west from Salt Lake City to Fort Ruby, thence to Simpson's Park, then crossed a small insignificent stream, known as Reese River, on to the sink of Carson River, thence to Carson City. About this time, the western portion of Utah Territory was erected into a new territory, as Nevada. The overland mail station on Reese River was a large pure spring of water, known as "Jacobs's Spring," and in possession of J. R. and G. W. Jacobs, now pioneers of this new, rich mineral district. This route was the one first traveled by Capt. Simpson, and afterward journeyed over by a Mormon train from Salt Lake City to Genoa, under the charge of Reese and Edwards. In the fall of 1862, one William Talcott, an employee of the Overland Mail Company, who resided at Jacobs's Spring, went to the hills lying between Reese River and Simpson's Park, to cut wood, and there discovered the first metaliferous quartz-ledge, which, with the many others, has since made the Reese River country so well known. It was located as the "Pony ledge," and is yet known as such, and is one of the valuable ledges in the district; but from the great number of shares in it—some 3600—which has passed into many hands in small amounts, has become too cumbersome and unwieldy to be worked to advantage, its shareholders being scattered all over the Pacific coast. It was so named, as Mr. Talcott was once a pony express driver.

Reese River rises in the south, in about the 38th parallel of latitude, and flows directly north, nearly on the line of the 40th meridian of longitude for about 250 miles, and then sinks in a flat about 80 miles from the Humboldt. It curves a little westerly the last 80 miles. It is a small, sluggish stream, about six or eight feet wide, and in its course disappears once or twice in sinks, to rise again at a distance below. To the east of this river (a river in this desert, but badly to be denominated a creek or run elsewhere) and parallel with it is a range of hills known as the Toyabe Mountains, and which are crossed by the overland mail and telegraph in about latitude 40°. This is the central point in the new State of Nevada. This range of hills is about five miles wide, the valley east of the hills being called Smoky Valley, where the waters, mere mountain streams from springs, run southerly. To the west of the river is another range of hills, called the Mount Airy Range.

In the Toyabe Range are the following mining districts: the most northerly, the Cortez, then Amador, Reese River, Summit, Smoky Valley, Big Creek, Simpson's Park, Santa Fé, Washington, Twin River, etc. East of the Smoky Valley is San Antonio. In the Mount Airy Range are Ravenswood and Union Districts.

The city of Austin, containing nearly 10,000 inhabitants, is in the Reese River District, and its main street is the overland mail road. Daily the stages pass to and fro with the mail from New York to San Francisco, and the telegraph gives news at all hours from every accessible point on the globe. President Lincoln died at half-past seven A. M., in Washington, and at 12 M. Austin City way draped in mourning, and the houses of business closed for the day. The discovery of the mines in this section of the country created the natural wants of Government, and Lander and Nye Counties were erected in this portion of the Territory. Austin is the county-seat of Lander, Ione City that of Nye. The latter is a flourishing city in the Union District.

The valleys here are barren, desolate, alkali flats, vegetating only sage brush, and scarcely a living animal is to be seen thereon—no shrub, brush, or tree, save the omnepresent sage-brush. The mountains are covered with a sparce growth of diminutive pine, juniper, and mahogany, scarcely ever exceeding 60 feet in hight, and furnishing a scant supply of lumber. Some of the gulches in these hills are fertile, and are now cultivated to supply the wants of this new population; but the valleys are worthless for any purpose whatever.

Soon after the discovery of the Pony ledge, thousands visited this hitherto uninhabited region, a barren waste and dreary desert, and hundreds of valuable mines were located, towns built, mills erected; so that at this early day, under all the difficulties of a want of capital to develop this immensely rich country, we are now exporting monthly the amount of $150,000 in bullion, which sum will vastly increase as mills are erected; for the wealth lies here in our quartz, awaiting only capital, skill, and science to convert it into bullion. The mills heretofore built were small five and ten-stamp mills, the expence of running which was as much as twenty or thirty-stamp mill; but parties had not the means for this increase in machinery. — *Correspondence Petroleum Chronicle.*

St. Petersburgh and Moscow Railroad Contract.—Mr. Thos. Winans and his brothers, who are residing at Brighton, near London, have just entered into a contract with the Emperor of Russia for the running and keeping in first rate order, the St. Petersburgh and Moscow Railroad, and it is quite probable that in the management of that great road, which was origiually constructed and stocked by them, they will give ample satisfaction to all interested. Upon their retirement some years ago from the management of the road, it fell into the hands of a French company, who, according to unquestionable authority, did not conduct it acceptably, and the consequence is that the Messrs. W. once more have it in their possession. The terms of the contract, it is stated, extend to the period of eight years, and they receive about eight millions of roubles (quoted at seventy-five cents each,) per annum for the work. Mr. James Murray, late of the Vulcan Works, Baltimore, and well known as one of the ablest engineers now living, is the chief superintendent employed by the Messrs. W. These gentlemen have nearly completed their iron cigar steamer in London, which, they are quite confident, will make 25 miles per hour, and cross the ocean in six days. Some statements made about this steamer several months since, gave her a length of 700 feet, which is the measurement of the Great Eastern, but an official drawing of her received here, puts it down at 260 feet.—*Baltimore American.*

## MINERAL WEALTH OF PENNSILVANIA.

The follnwing statements, made by the Secretary of the Board of Trade of Philadelphia, present a very clear view of the astonishing income from coal, petroleum and iron, in Pennsylvania in a single year:

| | TONS. | |
|---|---|---|
| The total amount of coal mined for year ending June 30th, 1864, has been of hard Anthracite | 9,876,174 | |
| Of Semi-Anthracite and Broad Top Region | 422,992 | |
| Of Bituminous | 2,399,246 | |
| Total | 12,698,412 | |
| Tons of 2240 pounds each. The value of this has been estimated by those associated with the business, at $5.50 per ton average for the year, at the nearest delivery market to the mines, which is | | $69,821,926 00 |
| On which the Government has received | | 437,192 68 |

The product of petroleum has been as follows:

| | |
|---|---|
| Exported 24,035,699 gallons of refined, worth an average (subject to shipping charges) of two shillings sterling per gallon, and furnishing exchange to that amount or | £2,403,569 |
| Of crude, the export has been 8,069,319 gallons, worth | 941,420 |
| Total of crude and refined, worth £3,344,989, and furnishing exchange to that amount in currency at $10 per £ | $33,449,989 |
| Total refined in Pennsylvania, 13,349,974 gallons, worth 74 81 100 average value, or 75 cents | 10,012,481 |
| Of which the Government has received | 1,334,997 |
| The balance of the production is expressed 8.605,215 gallons refined in other States, which is equal to 11,930 867 gallons of crude, worth | 3,429.260 |
| Bringing these together, it is | $33,449,989 |
| Exports home consumption distributed in Pennsylvasia | 13,462,441 |
| Total | $46,912,430 |

The product of iron has been:

| | |
|---|---|
| Of railroad bars, (exclusive of 37,672 52-100 tons re rolled,) 96.222 tons at average $185 | $8,257,210 |
| Of rolled plate iron, 86,932 tons, at $100 | 8,693,200 |
| Of iron bars other than rails, at 73,342 tons at $90 | 6,600,780 |
| Of heavy castings, 45,772 tons, at $100 | 4,577,200 |
| Of cut rails and rivets, exclusive of such as were made of imported iron, 37,135, at $200 | 7,427,000 |
| Of hollow ware and stoves T, 11,960, at $200 | 2,390,000 |
| Of manufactures of iron into various useful forms, machinery, etc., value | 12,633,646 |
| Of steel bars, etc., 4039 T, at 12 cents, or $250 per ton | 1,000,750 |
| Of steel bars of finer kind, 3219 tons, worth $100 per ton | 1,287,600 |
| Of manufacturcs of steel, (saws, springs, etc., etc.) | 1,908,611 |
| Total value | $54,784,997 |
| Of which the Government has received in internal duties | $1,046,837 |

Bringing these articles together, we have:

| | |
|---|---|
| Coal | $69,821,926 |
| Petroleum | 46,912,430 |
| Iron | 54,784,997 |
| Total of these articles | $171,519,353 |

One-half of the value of the greatest cotton-crop ever marketed.

It is proper to say that the coal used in the manufacture of this iron is twice included, once as coal, again in the iron as produced, This would reduce the aggregate by a considerable amount. But this sum would be more than counterbalanced by pig iron produced and exported from the State, of which no record exists and no account is taken. All this produced from the soil of Pennsylvania, and for three articles only, in one year; leaving the residue so much more valuable in the estimation of the community as to induce a demand for further investment such as has scarcly been known before. The vast sum of $171,519,000 has been distributed in the most equitable manner possible to imagine, by the simple operation of just and equal laws. The public carriers, the land owner, the miner, the operater of the mine, the various middle-men, and the cherished Government, have each received an equitable share.

---

From the Colorado River, Arizona.—Recent accounts from the Colorado report that Capt. Truworthy has been able to take his little steamer up the Colorado, quite a distance above El Dorado Canon, and to a point within 400 miles of Salt Lake City. The water in the river is unusually low at the present time, yet Capt. Trueworthy had no difficulty in reaching a point considerably above where he expected to find the limit of steam navigation. The Captain immediately proceeded to Salt Lake, visiting all the principal settlements on the way. He was everywhere received with many manifestations of joy at the success of his enterprise. This important enterprise is highly significant of the future of this magnificent valley, and public opinion is already setting strongly in that direction. A new and important chapter has been commenced in the history of Colorado and Arizona. We hear of new and important gold discoveries in Colorado, at the entrance of the next pass below Weaver's, in the mountains, on the Arizona side of the river, about fifteen miles from Olive City, and twenty miles from La Paz. The new placers are in what is known as "dry diggings," similar to that at Olive City, and quite rich. Nuggets weighing as high as four ounces are reported to have been found, and a number of men are said to have made as high as $100 per day at dry washing.

---

Western and Atlantic R. R.—This, one of the most important railroads in Georgia, connecting as it does the Great West with the Atlantic coast, is fast progressing to completion. From Chattanooga it is now in running order to Cartersville, a distance of eighty-eight miles. Fifty miles more and the whole road will be completed to this point. The large force now at work on the unfinished part of the road warrant us in stating that the whole road will be in running order in the space of three or four weeks.—*Atlanta Intelligencer.*

## MONETARY AND COMMERCIAL.

The demand for loans in the discount market are not equal to the supply of capital; this is, however, no new feature at this season of the year, so that bankers pay more attention to dealing in the various government securities as a means of profitably using their funds. The close proximity of July 1st, being the semi-annual settlement day, also has its influence in curtailing new movements.

Eastern Exchange is in demand, and currency is sometimes remitted to keep up balances. Quotations are as follows:

| | Buying. | Selling. |
|---|---|---|
| New York | 50@75c. | 1-10c. prem. |
| Philadelphia | 50@75c. | 1-00c. prem. |
| Boston | 50@75c. | 1-10c. prem. |
| Baltimore, | par. | 1-10c. prem. |
| Gold | 38@38¼ pm. | 39@40 prem. |
| Silver | 28@29 pm. | 29@30 prem. |

There has been more or less excitement and uncertainty in the New York gold market, but the range in the fluctuations have not been very wide. The following shows the condition of the market.

| | Opening. | Highest. | Lowest. | Closing. |
|---|---|---|---|---|
| June 22 | 142½ | 143⅛ | 141½ | 142 |
| " 23 | 141¼ | 141⅞ | 140¼ | 141⅝ |
| " 24 | 142¼ | 142½ | 141¾ | 142 |
| " 26 | 140 | 142¼ | 140 | 142 |
| " 27 | 141¾ | 142¼ | 141 | 141¾ |
| " 28 | 141¼ | ..... | 139 | 139⅝ |

The *Tribune* of Wednesday remarks that—

"As much as ⅛ per cent. was paid for cash gold for delivery, and throughout the day the market was firm in the face of a diminished demand for Sterling at 109@109¼ for leading names.

"Government stocks are steady and in good demand for all descriptions. Border State stocks are stronger—Missouri 6s, 74@74½, Tennessee 6s, 71½, and North Carolina 6s, 75. In railway bonds little doing. Bank shares are offered sparingly and are held more firmly than any security upon the list. In the miscellaneous stocks more was done at full prices. Railway shares, early in the day, were quite strong, and in many cases an advance was paid. The improvement was not sustained at the public call. At the close of the day the market was steady at an advance over Monday's rates. The closing prices were: New York Central, 93⅜; Erie, 76¼; Hudson River, 108⅜; Michigan Southern, 64⅛; Reading, 95¼; Rock Island, 101.

"Money is abundant at 4@5 per cent. on call, and 6@9½ for commercial bills. The Stock Exchange uses very little money, and lenders have much difficulty in using their balances"

Messrs. M. K. Jessup & Co., No. 59 Exchange-place, give notice that the coupons due on the 1st July on the following railroads will be paid on that day by them, viz: Chicago and Alton first mortgage bonds, Joliet and Chicago first mortgage bonds, Dubuque and Sioux City first mortgage bonds, Dubuque and South-Western first mortgage bonds, Detroit and Milwaukee and Detroit and Pontiac coupons.

The coupons of the Providence, Pawtucket and Central Falls Railroad Company, due July 1, will be paid by Howes & Macy, No. 30 Wall st.

The Hartford and New-Haven Railroad Company have declared a quarterly dividend of $3 per share payable to stockholders in New York from July 3 to 10, at the Union National Bank. The third and final installment in the new stock is payable on the 10th of July next.

— The following gentlemen are elected directors of the Hudson River Railroad for the ensuing year:—C. Vanderbilt, D. Thomas Vail, John M. Tobin, H. F. Clark, James H. Banker, O. Charlick, Augustus Schell, William H. Vanderbilt, John Steward, Joseph Harker, Smith Barker, Jr., M. H. Sanford, Dean Richmond.

At the same meeting the following resolutions were adopted upon the retirement of Mr. John M. Tobin from the presidency of the road:—

SECRETARY'S OFFICE,
HUDSON RIVER RAILROAD COMPANY,
NEW YORK, June 12, 1865.

JOHN M. TOBIN, ESQ., President Hudson River Railroad Company:—

SIR:—I take great pleasure in handing to you the accompanying copy of the minutes of the Board of Directors of the Hudson River Railroad Company, adopted this day.

Very respectfully, yours,
THOMAS M. NORTH, Secretary.

Mr. Clark, from the special committee appointed at the last meeting, submitted the following report:—

Mr. John M. Tobin having stated at the last meeting of this Board that the year for which he had undertaken the discharge of the duties of President was about expiring, and that it was his determination not to become a candidate for re-election to the office of President, the committee to whom the matter of this announcement was referred respectfully report the following resolutions:—

*Resolved*, That the thanks of this company are due to Mr. Tobin for the manner in which he has discharged the duties of the office of President for the past year. We recognize that his administration of the office has been characterized by diligence, by fidelity and by the most strict integrity. Notwithstanding that the period of his administration has been attended by an extraordinary increase of transportation expenses, resulting from the extravagant prices of labor and materials which have prevailed, he has nevertheless so conducted the affairs of the company that upon his relinquishment of office he can congratulate the stockholders of the company upon its condition of unprecedented prosperity. He has carried out many measures of reform which have largely contributed to the economy of management and to the general welfare of the company. His administration has been so successful, and his personal demeanor has been so uniformly unobtrusive, courteous and kind, as to make appropriate this special acknowledgment of his valuable services, which we tender to him with the expression of our earnest wishes for his future prosperity and happiness.

*Resolved*, That the Secretary transmit to Mr. Tobin a copy of the foregoing resolutions.

H. F. CLARK,
C. VANDERBILT,
J. H. BANKER.

— Comparative statement of the earnings of the Cleveland and Pittsburg Railroad Company for the month of May, 1864 and 1865, viz:—

| | |
|---|---|
| Freight | $137,209 |
| Passengers | 69,358 |
| Miscellaneous | 9,000 |
| Total | $215,568 |
| Earnings May, 1864 | 203,514 |
| Increase | $12,054 |

— The following figures compare the last weekly statement of the New York associated banks with the returns of the previous week:

| | June 3. | June 10. |
|---|---|---|
| Loans | $210,416,543 | 208,392,635 |
| Deposits | 186,935,680 | 185,509,993 |
| Specie | 21,346,493 | 18,480,620 |
| Legal tenders | 51,065,440 | 56,201,836 |
| Circulation | 5,323,082 | 5,402,778 |

The deviations from the returns of the previous week are as follows:—

| | |
|---|---|
| Decrease in loans | $2,023,908 |
| Decrease in deposits | 1,425,687 |
| Decrease in specie | 2,865,873 |
| Increase in legal tenders | 5,136,396 |
| Increase in circulation | 79,696 |

The transactions at the Clearing House for the week compare as follows with the business of the previous week:—

| | |
|---|---|
| Balances, week ending June 3 | $18,796,908 |
| Balances, week ending June 10 | 18,689,783 |
| Exchanges, week ending June 3 | 389,049,879 |
| Exchanges, week ending June 10 | 420,542,866 |

Bids for fifty thousand dollars of the riot damages indemnity bonds No. 2 will be opened by the Comptroller of this city to-morrow (Tuesday), at two P. M. These bonds are duly authorized by the Board of Supervisors and the Legislature of the State. They will bear six per cent interest, payable semi-annually, and will be redeemable November 1, 1882.

The earnings of the Chicago and Northwestern Railroad during the first week in June amounted to $159,545. Increase over the receipts for the same time last year $30,102.

---

THE Railroad Commissioners of Connecticut report the following facts about railroads in that State:

| | |
|---|---|
| The chartered capital of the several railroads lying in this State, in whole or in part is | $23,582,043 |
| Of which there has been paid in | $17,203,531 |
| Total length of road constructed under charters granted, in or in part, by this State, is (miles) | 789½ |
| Of which is constructed in this State, (miles) | 697½ |
| The aggregate length of double track is (miles) | 125 |
| Making the entire length of track in use (miles) | 914 |
| The total income of the railroads in this State during the past year has been | $6,547,385 |
| Their net earnings have been | $2,162,838 52 |
| Passenger and other trains have run in all (miles) | 3,086,959 |
| Carrying (passengers) | 4,812,613 |

## GOVERNMENT TRANSPORTATION.

GENERAL ORDERS No. 17.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., March 16, 1865

1st. For the purpose of producing uniformity in the Transportation service and guarding against abuses, blank books of Transportation Orders will hereafter be issued from this office in the Chief Quartermaster of each Department, to be by him immediately furnished to each officer under his order entitled to issue the same; after the receipt of which no other form will be used, unless in emergencies when the prescribed blank form cannot be had, and then the reason for not using it must be stated in the order.

These blank orders will be numbered and registered in this office in such manner that there will never be two orders of the same number in circulation; they will be charged to the Chief Quartermaster to whom sent, who will in like manner charge and hold responsible his subordinate officers.

On exchange of posts, or on transfer to another officer, like receipts must be taken and forwarded to the Chief Quartermaster of each Department.

2d. Within five days after the end of each month, a concise report will be made to the Department Quartermaster of the number of orders issued, the number cancelled by error (which must accompany the report), and the number remaining on hand, with a statement of the amount of transportation furnished in the month; which report in a condensed form (accompanied by the orders so cancelled) will be by him immediately transmitted to the Quartermaster-General, under envelope, endorsed on margin "Rail and River Transportation."

3d. The marginal register should contain the substance of the order issued, and will be preserved by the officer issuing for his own protection, or return to the Department Quartermaster or this office, as may be hereafter required.

*Care should be taken at all times to keep on hand a sufficient supply of these blank orders*, which can be obtained upon application to the proper Senior or Department Quartermaster.

4th. Unless in extraordinary circumstances, all rail and river transportation, passenger and freight, at any post, will hereafter be under the control and management of a single officer, on whom requisitions will be made by other officers requiring transportation.

5th. When more than five persons, in one party, are to be transported over one road, or a continuous line of roads, separate orders for transportation must be issued for each road to be passed over. These orders should be received on the train instead of tickets, and are to be receipted by the party named in the order, and given up on the cars—the officers, or persons in charge, filling the receipt with the number actually carried. Five persons, or a less number, may be carried over a continuous line of roads upon a single order for transportation, and this order may be exchanged at the starting-point for tickets over the entire route.

6th. Settlement should not be made nor vouchers given to railroads on orders for passenger transportation properly belonging to other roads, but the *passenger* accounts for each road should be made up separately in the name of the roads to which they belong.

7th. Appletons' Railway Guide for January, 1865, will be used as a standard for indicating routes and fixing distances, unless the actual distance is proved to be less, in which case settlement will be made on the basis of actual distance. Where this Guide cannot be more readily procured it can be furnished from this office.

8th. When a number of troops are to be transported from any point to any other point, on the same day or train, it should be done in squads as far as practicable. A single transportation order, or set of orders, should be given to the ranking officer, or most responsible person of the several detachments.

9th. Blank books of Free Transportation Orders will also be furnished, to be used on boats belonging to, or in the service of, the Quartermaster's Department, or on railroads operated by the Government. The free passes in these books will be given to persons entitled to receive Government transportation, and should not be issued without designating on the order the boat or road on or over which the person is to be transported. The marginal registers in these books will also be preserved for return to the Department Quartermaster, or to this office, as may from time to time be required.

Should the route to be traveled be in part over roads or on those owned by private parties or companies, care should be taken that Free and Pay Orders are given as the case may require, or such requisitions furnished as will enable the party entitled to transportation to procure it at points where pay transportation commences.

10th. To warrant the granting of transportation, except in cases specified by Regulations or General Orders, published for general information, the person demanding the same should show a requisition or order from competent authority requiring the movement by public conveyance in the performance of public duty.

The original requisition, when not necessarily required by the officer presenting it should be retained by the officer furnishing the transportation; in other cases, a certified copy or necessary extract from the order should be furnished to, and preserved by, the officer granting transportation as his proper authority therefor, and a certified copy of the same must be endorsed on the back of the order.

11th. When the cost of transportation is to be reimbursed to the Government, as in the case of sick and furloughed soldiers, the required certificate should not only be made upon the furlough or order, but the transportation order should also be endorsed on the back substantially as follow: "The within transportation, furnished under General Order ——, and the proper officers duly notified. —— ——, A. Q. M."

12th. When transportation is granted to persons not in the military service, full explanations therefor should be given

13th. Orders for transportation should give the name of the party to be transported, or if there are several, then of the officer or person in charge, and state the number of men to be transported.

Orders for "one man," "ten men," and the like, without designating any name, are improper

14th. The receipts for transportation should be filled up in ink by the officer or person named in the order before signing, and if he cannot write his name, there should be a witness to his mark.

Names and places should be written distinctly in full, and not abbreviated.

15th. Duplicates of orders for passenger transportation should not be issued.

16th. When a requisition calls for transportation to any given point and return, the order should be issued to the place of destination, and the return transportation should be obtained at that point, provided it can there be procured.

17th. Upon the form of order now issued should be presented all the facts necessary to enable an auditing officer to decide as to the regularity or propriety of the order, so that it may be paid by any authorized disbursing officer.

18th. Erasures, interlineations, or alterations, if made against the interest of the Government, should be explained on the order by the issuing or other competent officer; otherwise, the transportation should only be settled for in accordance with the order before change or modification.

19th. Transportation by water being generally the cheapest should be selected when consistent with the interests of the service All transportation should be furnished by the shortest practicable route, unless a different route is indicated in the order which directs the movement. Where there are two or more competing routes without material difference in distance or time, the business should be divided in equitable proportion between them, the distance for which compensation is made being estimated by the shortest practicable route.

20th. In no case is subsistence furnished by the Quartermaster's Department.

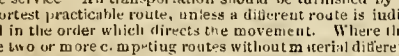
21st. The good of the service requiring that railroads should obey the requisitions of officers properly authorized to demand transportation, in case compensation is made by the Government for illegal or unauthorized transportation so required, the officer making the requisition or issuing the order will be charged therewith, or if not paid by the Government, the railroad will be entitled to recourse upon such officer.

By order of the Quartermaster-General,

LEWIS B. PARSONS.

*Colonel, and Chief of Rail and River Transportation.*


# The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

MONDAY MORNING, MAY 8,
THE
# Atlantic & Great Western Railway



WILL COMMENCE RUNNING ONE THROUGH TRAIN between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at 8:00 A. M; arrive 8:10 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, nr at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent,
E. F. FULLER, General Ticket Agent my11

# WRIGHTSON & CO.

# BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO


## *STEAMSHIP COMHANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS, between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | |
|---|---|
| WASHINGTON | 3,404 tuns, 900 horse-power. |
| LAFAYETTE | 3,204 tuns, 900 horse-power. |
| EUROPE | 3,254 tuns, 900 horse power. |
| FRANCE | (afloat), 900 horse power. |
| NAPOLEON III | (afloat), 11,00 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its equivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to

GEORGE MACKENZIE, Agent.
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building) | 3,12 | ——— |
| ENGLAND (now building) | 3,430 | ——— |
| SCOTLAND (now building) | 3,430 | ——— |
| ERIN | 3,310 | Grace. |
| HELVETIA | 3,315 | Prowse. |
| PENNSYLVANIA | 2,8[illegible]2 | Grogan. |
| VIRGINIA | 2,872 | Lewis. |
| LOUISIANA | 2,166 | Appleton. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to

WILLIAMS & GUION, No. 71 Wall street.

For steerage passage apply to

640* WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGE,

Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN | $90 00 | STEERAGE | $30 00 |
| First Cabin to London | 95 00 | Steerage to London | 34 00 |
| First Cabin to Paris | 105 00 | Steerage to Paris | 40 00 |
| First Cabin to Hamburg | 100 0 | Steerage to Hamburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR ..... 2,595 6 -95 tuns.
WISLIAM R. BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

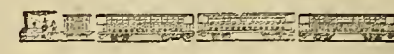
Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to

640* JAMES A. RAYNOR, No. 10 Barclay street.

# CENTRAL RAILROAD
—OF—
## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:0 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:30 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m.; 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p. m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.) 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); 8. m. (Ex.); 3:00 (Ex.); 12:15; 5; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 8:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3.00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

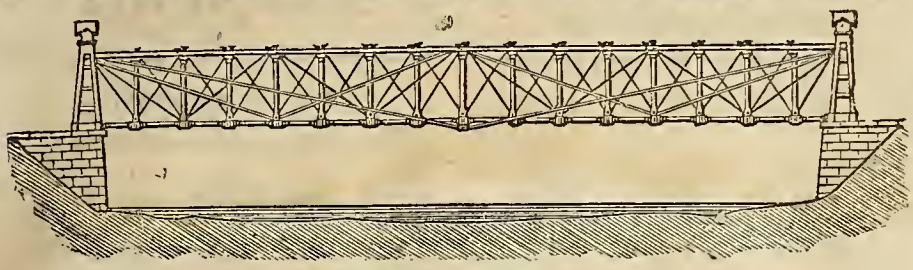
Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 10 a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

Jan. 5, '58. 1y. Letter Box, 1293. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets, Fish Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or not of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring). Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines. 419 y

---

## KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS.

PHILADELPHIA.

---

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

## FINDINGS

—AND—

## MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

Either Single or Double Plate,

With or without Axles.

## WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

## Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

## RAILWAY SPRINGS.

**FREIGHT**

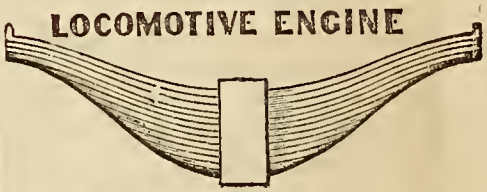




PASSENGER



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledge himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest. Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*. as recently charged; and the rate to Baltimore being $1,50 *lower than recently char. ged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASH ING. TON CITY.

W. P. SMITH. *Master Transportation. Baltimor*
J H. SULLIVAN, *Gen. Wes Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express..... | 6 00 A. M. | 7 30 P. M. |
| Mail and Express..... | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation..... | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation..... | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express ..... | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail..... | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo..... | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation..... | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville..... | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A. M. |
| Hamilton Accommodation..... | 7 30 P. M. | 8 05 A. M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Buses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | |
|---|---|
| Louisville, St, Louis and Cairo Depart. | Arrive. |
| Mail..... 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation..... 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express..... 8:00 P M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at.... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
General Ticket Agent.

W J. GRISWOLD neral Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE.



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis. at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 3:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets. good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD. President.
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

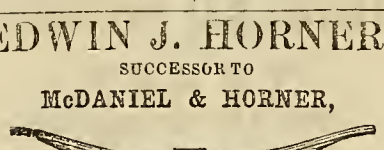
Sept. 2 MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

THE SCHENECTADY

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

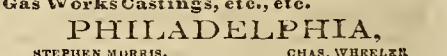
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11.30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East a Wes

WM. TEARNS Supt

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, JULY 6, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:40 A. M. | 8:15 A. M |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| *Atlantic & Great Western—* | | |
| | 8:00 A. M. | 8:40 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:30 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:45 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond, Chicago and Indianapolis | 7:00 A. M. | 9:45 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 10:20 A. M. |
| Richmond and Chicago | 7:00 P. M. | 12:35 P. M. |
| Hamilton Accommodation | 11:00 P. M | 6:45 A. M. |
| do do | 7.00 A M. | 8:05 A. M. |
| Dayton Accommodation | 2:20 P. M. | 9:45 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Chicago and St Louis Express | 7:50 A. M. | 12:00 M. |
| Springfield and St. Joe Express | 1:00 P M. | 5:10 P. M. |
| St. Louis and Chicago Express | 4:00 P M. | 2:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 4:50 P. M. | 8:35 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:40 P. M. |
| *Ohio & Mississippi—* | | |
| St Louis, Cairo and Louisville | 6:50 A. M. | 1:00 P M. |
| Seymour Accommodation | 3:45 P. M. | 5:10 A. M. |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |
| *Cincinnati Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 7:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 8.00 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:55 A. M. |
| Evening Express | 1:35 P. M. | 6:00 P. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## SOUTHERN TRADE FREE.

SOUTHERN RAILROADS PUTTING IN ORDER.

The following article from the *N. Y. Economist* describes the present state of Southern trade very accurately. The process of *reconstruction*, commercially, is going on more rapidly than even the most sanguine persons could have anticipated. From the Passamaquoddy to the Rio Grande, all ports are now open; and as far as there is material, money and resurces in the South, so far commerce will soon be in full activity. And the material and resources are far beyond anything which has been supposed. There can be no doubt that, taking the whole of 1865 together, the South will yield two millions of bales of cotton for the purposes of commerce; which will be worth full two hundred millions of dollars. This is a prodigious capital for active commerce, and when we add to it tobacco, tar, rosin and rice, we shall find capital enough to create an avalanche of business in the old channels now revived again :

After having been shut up within itself for a period of four years, the whole South is once more opened to trade and commerce with the world, the President having raised the blockade from the ports west of the Mississippi River, viz: Galveston, La Salle, Brazos de Santiago, Point Isabel and Brownsville.

Mr. Lincoln's proclamations, instituting a blockade along the coast in rebellion, were promulgated on the 15th and 27th of April, 1861. The announcement was greeted with derision by the infatuated Southerners, who ridiculed the idea of our being able to exercise an effective surveillance over thousands of miles of coast. Europeans, also, talked sneeringly of the Federal pronunciamento, and though prevented by the stipulations of the Congress of Paris from interfering, they predicted with much assurance that we could establish nothing more than a paper blockade, to be forthwith broken.

As time passed on, however, ship after ship was added to our navy, harbor after harbor succumbed, and the whole Southern coast was eventually hermetically sealed. Relying upon exports of cotton, sugar and other staples, for means to procure the munitions of war, the insurgents received a serious blow with the stoppage of every "rat hole," until at length the capture of Wilmington proved well nigh fatal to them, contributing nearly as much to their final overthrow as did our successes by land.

Happily for both the North and the South the occasion for the blockade has now passed, and to day all of our ports from the Passamaquoddy to the Rio Grande are thrown open to the world. President Johnson's speedy action in this matter will meet with the approval of all.

Opposed, as he has repeatedly declared himself, to monopolies, restrictions upon trade, everything which prevents a free exchange of commodities we may rest assured that he will aim to stimulate and develop the commerce of the country, having no sectional feeling, but witnessing with equal satisfaction the growth of both the North and South.

The effect of this course will be most happy on the restored States, convincing them that the general government does not seek to monopolize for the North the trade and commerce of the country, but is desirous of seeing the South enter upon a new career of prosperity, of seeing the Southern cities rise from their ashes and become once more flourishing marts. The Southerners will also now be encouraged to bring from the interior the large quantities of cotton and other staples, for which there is a ready demand, and we may expect to see a heavy trade soon inaugurated with most of the Southern ports.

Already is great activity witnessed in those States which President Johnson announced in his Proclamation May 22, would be relieved from the blockade embargo. Advices from Charleston state that every steamer from the North brings traders, who are met by the people from the interior with whom they exchange their greenbacks for Southern staples. Cotton and rice agents have penetrated to various sections of the State and made arrangements with the South Carolinians to bring their staples to the seaboard. From Savannah we also learn that an active trade has been opened with Augusta, Macon, and other points in the interior, and that numerous vessels have been ordered from the North to carry away the cargoes of cotton accumulating and disposed of on private account. Large numbers of vessels are also ascending the rivers above Mobile, and returning from the interior of Alabama laden with cotton, which the people are bringing into Montgomery, Selma, and other places. Grierson's cavalry, who have just arrived at Vicksburg from a long campaign through Florida, Alabama and Mississippi, having passed through regions never before visited by hostile troops, report that there are hundreds of thousands of bales of cotton in the interior of Alabama and Mississippi which the owners are anxious to dispose of. Files of Trans-Mississippi papers received this week state that cotton is rapidly coming in from the interior at Brownsville, Galveston, Shreveport and Axexandria, and it is estimated by them that there are fully one million bales of the staple in Texas and Western Louisiana.

In harmony with President Johnson's course in promptly re-opening trade, Secretary McCulloch has issued a circular removing all restrictions on the purchase, transportation and sale of all products in the restored States, except munitions of war. And all the agents for the purchase of products on government account in the late insurrectionary region are ordered by him to at once close their account, and send in their respective resignations to the Treasury department. In future, the private citizens are to enjoy the rights and privileges heretofore reserved to the government, and no fees or taxes are to be charged or collected except those imposed by the custom and internal revenue laws. Under such auspices we may expect to witness an increased revival of trade and commerce.

## SATURDAY'S MURDERS.

We fully endorse the following remarks of the New York *Tribune* of last Monday, and although it is undoubtedly true that for the amount of locomotion performed, no other method of traveling is safer than on railroads, not even "*going on foot*," yet these constantly recurring "accidents" are unnecessary and inhuman, and produce an amount of suffering and desolation that would require the necks of a great many officials to counterbalance. Let some remedy be applied, we care not what, so that the nuisance shall be abated:

"Two more railway 'accidents' on Saturday—only two—and, according to such accounts as we have, only one man killed outright, two or three mortally wounded, and an indefinite number seriously injured. We ought not to omit what the railway directors will consider a much more serious matter—that a good many cars and other corporation property were injured, and we have no doubt the corporation concerned in these disasters regret them, for they are expensive. The consolation to the ingenuous minds of superintendents and presidents is that it is cheaper on the whole to keep their roads permanently in poor running order—cheaper to do a little murdering than a little repairing—cheaper to pay for a few shattered cars and limbs than to hire an extra signal man, than to replace rotten sleepers by sound ones, than to re-lay tracks that are dangerously near to each other.

"The 'accident' on the Hudson River Railroad at Irvington may be the five-hundredth or the five-thousandth that has occurred within five years from similar causes. The switch was wrong. Why was the switch wrong? Because the company would not pay a man to keep it right—would not pay a dollar and a half a day to save a hundred passengers from the probable chance of destruction by an 'accident.' Says an account: 'The place where the accident occured is about three hundred feet from the depot, and the switchman, whose *duty* it was to be at his post, was absent attending to *other duties* at the depot' Of course he was, or if he had not been absent Saturday, he would have been some other fatal day. A man can not always be in two places at once—even if he be a Hudson River Railroad employee. The case could hardly be better stated than by this blundering reporter. It was the switchman's 'duty' to be at the switch, and it was his 'other duty' to be 300 feet off at the same moment. The Irish-English of the reporter may be pardonable; but the worse than Irish blunderiug of the corporation, the meanness, the stupidity, the murderous parsimony of the corporation which puts one man to do the duty of two or three, at the risk of such a catastrophe as this of Saturday—is *not* pardonable. But the public pardon it—by still patronizing the road that murders its passengers; the Legislature pardous it—by affixing no adequate penalties for the crimes it commits; above all, coroners' juries applaud and encourage corporation and corporation servants alike by the quasi-judicial immunity they contrive to extend over both. What can we do about it? The President and Superintendent and Directors of the Hudson River Railroad who read this article will echo the question with a chuckle: What can press or public do about it? Well, perhaps not much to-day, nor to-morrow—not this accident nor the next; but *some* 'to-day' will arrive; *some* accident, or some dreadful succession of catastrophes will find their inevitable result in an outburst of popular indignation, which may even provoke a legislative enactment stringent enough to make it the policy of the railroads to stop their wholesale homicides for the benefit of their stockholders' pockets. So laugh on, Messrs. Presidents, Superintendents and Co.—your murderous merriment shall not be forever.

The collision on the New-Haven and Harlem Railroads is simply the fulfillment of a prediction long since made. Since those tracks on the Yorkville bridge were laid, the cars have been widened, the tracks have approached each other from the settling of the bridge, the speed of trains has been increased, and the projecting or how windows have been added to the cars. It was inevitable that the long trains which every day's vibration brought nearer and nearer, should some day strike. The consequences of the collision Saturday were so slight compared to what might have been expected, that the passengers may think themselves fortunate to have escaped as they did. But the warning ought to be sufficient to prevent another and worse disaster. Let us see whether it proves to be so.

## A MONSTER STEAM-HAMMER.

The engineering science in its giant progress is constantly needing increased power in its appliances; and the massive forgings now required in shipbuilding necessitate steam-hammers of corresponding proportions. Many huge hammers have been made, but none have yet reached the size of the one now in process of erection at the Bolton Iron and Steel Works. This hammer is being made by Messrs. Nasmyth & Co., of Patricroft, and is of gigantic proportions, and will strike a blow equal to 75 tons. This of course will require an immense anvil block, and the process of casting one for it, weighing 200 tons, on Wednesday last, was a work of unusual interest. The iron was smelted in two large patent upper tuyere cupola furnaces, 24 feet in height and 7 feet in diameter. The molten metal was run into the moulding in a constant stream, supplied alternately from each furnace. The process occupied ten hours. The metal was kept in a state of fusion by means of burning charcoal until the whole quantity was poured in. The anvil block measures 12 feet square at the base, and 12 feet 6 inches in depth. The figure is pyramidical, and it is cast base upwards. The metal contains a certain portion of Bessemer steel. The casting was performed under the superintendence of Mr. Ireland, of Manchester. Large numbers of visitors were at the works during the day, and were entertained at luncheon. The huge casting is not likely to be perfectly cold three months hence, and it will certainly not be reduced to a sufficiently low temperature to be dealt with under two months. When cool enough, it will be turned over, as already explained. The bed for the reception of the block will be enclosed in a large circular wrought iron cylinder, measuring 20 feet in depth, and 18 feet diameter This will be sunk in the ground and filled with concrete, and when finally deposited in its bed the anvil will appear about 2 feet 6 in. above the ground.—*Liverpool Albion.*

French Locomotives on English Railways.—A correspondent of the *London Times* writes: "Connected with the construction of public works in France, I have during the last twelve months assisted in the purchase of railway materials, and to a very considerable extent. Desirous of obtaining the best materials at the lowest rates, English and French houses have been placed on equal conditions in direct competition. The experience that I have gained proves that rails and their accessories can be purchased from French makers, delivered at the makers' works, of better quality and on better terms than they can be purchased delivered at the makers' works in South Wales. With reference to locomotives, the difference was greatly in favor of the French manufacturers In sleepers, native French growth competed, and with a wide margin, with imports from the Baltic. A railway in Northamptonshire is at the present time laid with Belgian rails imported *via* Wisbeach. In short, the French nation are advancing with giant strides in material prosperity. We have little to teach, but much to learn."

## PARISIAN SCIENCE.

The Paris correspondent of the London *Chemical News* writes as follows:

"*Hygrometers.*—A new hygrometer has recently been invented, which, it is said, gives very correct indications. It consists of a thin circular slice of ivory sawn into a spiral, which, being extended, by its contractions and expansions gives motion to an arm. I doubt whether this apparatus is more sensitive than the old twisted catgut form of weather indicator.

"*Heat Generators.*—M. Pelon's 'heat generator,' which I mentioned last week, is in actual use at the Central Pharmacie, and seems to be really efficacious. The machine is turned by a force equal only to about the twentieth of a horse power, but after rotating for about eight or ten minutes the air escaping from the apparatus was found to have attained a temperature of 70 C. An apparatus of a similar size, moved by the same force, it is said, will, in the coldest winter, keep a railway carriage at a constant temperature of 22° to 25° C., which will be a great comfort to the passengers.

"*Stereoscopes.*—On the 21st of last month the Photographic Society of Paris awarded four gold medals. One of these was allotted to Sir David Brewster for the invention of his stereoscope. The Abbe Moigno wonders why the Society did not go back further, and give a medal to Professor Whetstone for his stereoscope.

"*Consumption of Smoke.*—The recent edict of the Minister of Agriculture and Commerce, ordering manufacturers using steam power to consume their smoke, has excited much opposition. There are plenty of inventions here as well as in London for effecting this purpose, but they do not seem to answer any better here than with you. The Industrial Society of Mulhouse have sent a petition to the Minister, asking for a suspension of the edict for six months, that the question may be seriously studied. They say that none of the inventions yet brought out are satisfactory in practice. They either necessitate an increased consumption of coal or they require greater attention on the part of the stoker than can possibly be given in actual practice. The inventors, of course, deny the truth of these assertions, and thus the matter at present remains. There would seem to be a field for Mr Juckes, whose apparatus I have seen to answer perfectly in London, and to require very little attention by the stoker.

"*Seguier's Cartridges.*—I mentioned M. Seguier's new cartridge last week, and, writing in a hurry, did not, I am afraid, give a very clear account of his ideas. I should have said that the best application of the force which is produced by the conversion of solid into gaseous matter is made when that force is, so to speak, generated *crescendo.* This the Baron effects by first igniting a slow-burning powder, which starts the ball, and firing afterwards a charge of gun-cotton, which gives a tremendous impulse, thus imitating the action of an air gun. The Emperor has taken great interest in the Baron's experiments and invention. Emperors usually do take great interest in destructive arts. The Baron appeared again at the last meeting of the academy, and exhibited a curious and very interesting experiment. Your readers will remember Faraday's old experiment of smashing a glass vial by breaking a Prince Rupert's drop within it immersed in water. The experiment of Baron Seguier is of a similar kind, and illustrates the same fact—

namely, the incompressibility of water. He took a glass tube, and suspended it vertically in a vessel of water. He then let a leaden bullet fall through the tube, the effect of which was to split the tube into longitudinal fragments, like the staves of a barrel. When only a part of the tube is immersed, the effect is more curious still. That part not immersed remains entire, but the tube is cut off at the level of the water, and the part under the water is split, as before mentioned. Any of your readers can make these experiments for themselves. General Morin made some remarks on this subject, and mentioned some experiments made several years ago, in which solid and hollow shot were fired into water horizontally below and parallel to the surface of the water. The resistance of the water was found to be so great that the shells were in all cases broken to pieces. The earthwork of the tank, four meters thick, was always strongly shaken, and the experimenters felt the ground tremble under their feet.

## PROPOSED STEAMSHIP LINE BETWEEN NEW YORK & GENOA.

The North American and Italian Steamship Company (incorporated during the last session of the Legislature) have issued a prospectus, giving most valuable information to those who desire to encourage trade and intercourse between America and the Mediterrancan by subscribing to the capital stock of $4,000,000—divided into 40,000 shares of $:00 each—four per cent interest being guaranteed by the Italian Government. The steamers will be commanded by well-known American officers, and will sail semi-monthly between New York and Genoa, touching at Madeira, Cadiz and Marseilles, both ways, and connecting with steamers between Genoa and Naples. It is claimed that by this direct line between New York and Italy, the cost of a first-class cabin passage will be one hundred dollars less than the expense of traveling across the continent by the old route. Between Madeira and Genoa the ship will be but a short time out of sight of land, and fine views will make the run charming along the coasts of Portugal, Spain, France, and Italy. The time of passage between the ports touched will be usually six days from New York to Madeira; ten days from this city to Cadiz; thirteen days to Marseilles; fourteen days to Genoa; sixteen days to Naples. It cannot be denied that whenever this steamship line goes into active operation more direct intercourse will be had with Southern Europe; and Switzerland and South Germany will become much more accessible to American travelers than hitherto.

Atchison & Pike's Peak Railroad.—Under the late reorganization of the Atchison and Pike's Peak Railroad Company, embracing Wm. Osborn, of New York city, as contractor, the company is allowed to place a first mortgage lien on the road as fast as completed, and to use the money derived therefrom for contracting other portions of the work. The new organization has the following officers: General S. C. Pomeroy, President; Willis Gaylord, Vice President; James Wadsworth, Secretary and Acting Treasurer; Chauncey Vibbard, Chairman of the Executive Committee; O. B. Gunn, Chief Engineer; and Judge Bonney and J. E. Williams, President Metropolitan Bank, New York city, Trustees of Bonds. The company has issued its bonds to the amount of $1,600,000, and Mr. Wheeler, and English gentleman, in connection with Chauncey Vibbard, are the agents for their sale. They are to be sold abroad. It is the determination of the company to push the road with energy—*Atchison Champion, June 2.*

## THE NATION'S WEALTH IN GOLD AND SILVER.

*The Gold Producing Area of North America; Subdivision of the Area between the United States, Germany, France, British and Russian Powers; Louis Napoleon's Programme Foreshadowed; Rapid Expansion and Development of the National Resources.*

The Precious Metals in Ancient Times.—For the last three thousand years gold and silver have been the regulators of trade among nations and men. Six hundred years before the Christian era the mines of Egypt, Thracia, Thessaly, Armenia, Aquileja and Spain yielded sufficient to increase the prices of food. The mines of Carthagena afforded work to forty thousand men, and daily produced a quantity of gold equal to about four thousand dollars. Hannibal obtained three hundred pounds of silver a day from a mine situated near a place now called Guadalcanal. The richest mines known to the ancients existed in Asturia. There were also considerable ones in Sardinia. The quantity of gold and silver which Alexander the Great took from the Persians at the battle or Arbela, three hundred and thirty-one years before Christ, amounted to about two hundred and fifty millions of dollars; and at the period of his death the bushel of wheat, which cost but the value of fifteen of our cents three hundred years before, cost three ounces of silver. Such, it is alleged, was the difference in price caused by the influx of the precious metals. In the year 40, of our era, the bushel of wheat cost about one hundred and thirty of our cents, and all the gold and silver in circulation was estimated at sixteen hundred millions of dollars. After the invasion of the barbarians much of this treasure seems to have disappeared in some unaccountable manner; for in the year 400 the total quantity of the precious metals scarcely amounted to two hundred and fifty millions of dollars. The mines certainly produced much less, the art of working the metals was lost, and it was not until the year 1000 that the circulating medium began again to increase. In 1492, the period of the discovery of America, the whole capital in circulatiou throughout Christendom was valued at about one hundred and eighty millions of dollars. From 1492 to 1519 the influx of gold into Europe from the New World did not exceed two hundred and fifty thousand dollars per year; but the production of Mexico soon rose to twelve times as much. During the seventeenth century the auuual production of Spanish America was fifteen millions of dollars, and it was not more than twenty-five millions at the beginning of the present century.

The Amount of the Precious Metals now in Existence.—The amount of gold now in existence is estimated at four thousand eight hundred and sixty-two millions; of silver, five thousand seven hundred millions—making the total of precious metals now existing, ten thousand five hundred and sixty-two millions of dollars, with an average aunual product of gold throughout the world of over two hundred and seventy-one millions.

What America has Produced.—Of the latter. the gold fields and gold-bearing mountains of America produced in 1863 one hundred and forty-four millions. The amount of silver mined in the same time was sixty millions of dollars, of which America produced forty-four millions. The following table is interesting in this connoction, as showing the

QUANTITY OF GOLD PRODUCED BY THE SEVERAL GOLD PRODUCING COUNTRIES FOR 1846 AND 1863.

| | 1846. | 1863. |
|---|---|---|
| California | —— | $70,000,000 |
| Other States of the Union | $1,300,000 | 30,000,000 |
| British Columbia | —— | 6,000,000 |
| Mexico | 18,500,000 | 25,000,000 |
| South America | 13,000,000 | 13,000,000 |
| Total for America | $32,800,000 | $144,000,000 |
| Russia | 18,000,000 | 22,000,000 |
| Other Europ'n countries | 6,600,000 | 6,800,000 |
| Asia and Africa | 4,600,000 | 5,775,000 |
| Australia | —— | 75,000,000 |
| New Zealand and other British colonies | —— | 12,000,000 |
| Other countries | —— | 6,000,000 |
| Total | $62,000,000 | $271,575,000 |

The calculation for 1864 will show an immense increase in the amount of gold and silver produced from the auriferous and argeutiferous area of the United States, in regard to which we shall presently have more to say. We will now proceed to define, as near as can be from the data at hand, the extent of this area in North America, showing the amount belonging to the United States, as compared with that occupied by Mexico, (including the area claimed by Maximilian and that ceded to Napoleon,) and the amount at present owned by Great Britain and Russia.

The Gold Bearing Area of North America.—The gold bearing area of North America embraces the two Cordilleras and the enclosed plateau. This area comprises, by latest calculations, two millions five hundred thousand square miles, or over sixteen thousand millions of acres, distributed as follows:

Owned by the United States two and one-half fifths, or one-half—1,250,000 square miles.

Owned by Mexico (or Maximilian and Napoleon) to the south, one and one-half fifths—750,000 square miles.

Owned by Great Britain and Russia, to the north, one-fifth—500,000 square miles.

RECAPITULATION OF THE GOLD BEARING AREA OF NORTH AMERICA.

| | Square Miles. |
|---|---|
| United States | 1,250,000 |
| Mexico | 750,000 |
| Great Britain and Russia | 500,000 |
| Total | 2,500,000 |

How the Mexican Territory is divided.—Passing for the present the consideration of the amount of auriferous territory owned by the United States, we will first take in hand that owned by Mexico, or Maximilian and Napoleon the Third combined:

The Mexican territory is subdivided into twenty-five States, having a metalliferous area as above, with an aggregate population of about nine millions. Before the treaty of Guadaloupe Hidalgo and the Mesilla or Gadsden treaty, Mexico comprised an area of one million six hundred and ninety thousand three hundred and seventeen square miles; but by the first mentioned treaty her territory was reduced 897,650 miles, and by the second, 26,185 miles, leaving the precise balance seven hundred and sixty-six thousand four hundred and eighty-two miles. The precious metals are found in nearly every part of the country. In nearly every State mines are now or have been worked. In some portions mining absorbs the entire energies of the people; in the others, manufactures and agriculture receive some attention. This was the condition at the time of the assumption of the empire by Maximilian. By the subsequent cession of the Northern States to Louis Napoleon, the arrangement as set forth in the following table, holds at present:

| Maximilian. | Area Sq. Miles. | Populat'n. |
|---|---|---|
| Aguas Calientes | 2 647 | 83,243 |
| Colima | 2 918 | 61,243 |
| Chiapas | 18,051 | 161,914 |
| Guanajuato | 14,035 | 929 331 |
| Guerero | 30.926 | 270,000 |
| Jalisco | 46,945 | 804,058 |
| Michoacan | 22,920 | 491,679 |
| Mexico | 18,881 | 1,012,554 |
| Oajaca | 34,948 | 581,962 |
| Puebla | 8,581 | 655,622 |
| Quertero | 1,820 | 180,000 |
| San Luis Potosi | 27,194 | 390,360 |
| Tobasco | 18,996 | 75,901 |
| Tlaxala | 1,918 | 80,171 |
| Vera Cruz | 26,493 | 338 859 |
| Yucatan | 47,253 | 680.325 |
| Zacatecas | 25,833 | 302,141 |
| District of Mexico | 87 | 230,000 |
| Total | 358,548 | 7,529,616 |
| Napoleon. | | |
| Chihuahua | 80,701 | 160,000 |
| Durango | 46,857 | 156,519 |
| Nouva Leon and Coahuila | 70,793 | 212,450 |
| Sonora | 86,855 | 147,133 |
| Sinaloa | 32 586 | 160,000 |
| Tampico | 29,344 | 108 514 |
| Lower California | 58,620 | 9,000 |
| Total | 405,273 | 953,616 |
| Total Maximiliau | 358,547 | 7,529,616 |
| Napoleon's excess in territory | 46,726 | less popul'n. 6,576,000 |

The increase in population since the above calculation was made—eight years since—is estimated at the rate of 144,000 per annum, which will give a population rising nine millions at this time.

By the above table it will be seen that Louis Napoleon has the larger area of metalliferous territory, but which is comparatively little populated. Maximilian retains the smaller area with a denser population. Napoleon s plan is to fill up his territory with emigrants of his own choosing, while Maximilian takes care of the mass of the population of Mexico. Napoleon's territory has a frontage on the two shores of the Gulf of California and the external ocean, being a greater sea front than that of Maximilian on both the Atlantic and Pacific. Napoleon's frontage on the Atlantic or Gulf of Mexico lies aloug the coast of the State of Tampico, which is a front of the greatest importance in consequence of the transit across the Atlantic, and embraces the traverse line from Tampico and Matamoras, by way of Monterey, Saltillo and Chibuahua, to Guayamas on the Pacific.

The Napoeonic Programme.—It being a part of the Napoleonic programme to compensate Maximilian for the cession of so imposing a portion of his metalliferous realms to annex to the Mexican empire a part of Central America, we append a table showing the area of those Central Americau States likely to be so transferred. It will he remembered that Maximilian has, by proclamation, annexed the State of Honduras, in Central America, to his imperial domiuions.

AREA AND POPULATION OF THE STATES OF CENTRAL AMERICA.

| | Area in Sq Miles. | Populat'n. |
|---|---|---|
| Guatemala | 43,380 | 971,459 |
| San Salvador | 9,600 | 394,000 |
| Honduras | 39 600 | 358,000 |
| Nicaragua | 40,200 | 257,000 |
| Costa Rica | 21,800 | 215,000 |
| Total | 154,580 | 2,195,460 |

The above territory is outside of the metalliferous mountain system of North America, as above defiaed. We refer to it here merely for the purpose of showing the amount of territory Maximilian is likely to absorb if the original Napoleonic programme in regard to the American continent is allowed by the government of the United States to be consummated.

TOTAL AMOUNT OF PRECIOUS METALS PRODUCED BY MEXICO.

The total amount of precious metals produced by the mines of Mexico since the period of the conquest, 1521, to the present day, 1865—three hundred and forty-six years, is estimated at six thousand millions, or an average of nearly twenty millions per annum. This includes the amount registered as exported, the amount illicitly carried away, and the amount retained for home consumption. The total amount exported for 1863, as we have seen, was twenty-five millions, but that for 1846 was only eighteen millions and a half.

Richness of Napoleon's Area.—The area retained by Maximilian in the late partition of the Mexican territory is that portion which has heretofore furnished the bulk of the production of the precious metals. The area assigned to Napoleon is capable of a still greater development and production. The gold and silver mines in Sonora, Sinaloa, Durango, Chihuahua and Nueva Leon are about equally diffused over each State—mints being located at the special mining points in each.

What may be Expected in Mexico.—It is reasonable to expect in Mexico from the Germanic people, and from the French and Italians, an infusion of the energies of production parallel to that which we have formerly seen characterize the Spaniards, and more lately the Americans in California and the British in Australia, in developing newly acquired gold bearing countries. If such should be the case, we may expect to see, within a few years, the Mexican territory of Louis Napoleon equalling in production the former entire gold and silver producing area of Mexico.

Gold Bearing Territory in British America.—North of the forty-ninth degree of latitude the British territories in North America front upon the Pacific Ocean, having a coast line of seven hundred and fifty miles, together with the great islands of Vancouver and Queen Charlotte. The gold bearing area which lies here immediately adjacent to the coast may be estimated at two hundred thousand square miles, or three times the area of England and Scotland. The aggregate production of gold from this area probably equals seven and a half millions, principally derived from the regions drained by Frazier river.

Gold Bearing Territory in Russian America.—Russia occupies the territory filling out the continental interval to Behring's Straits, comprising an area of three hundred thousand square miles, with a coast line of twelve hundred miles upon the Pacific and Arctic seas. The search for gold over this area has been limited to the ascertainment of its existence. The energies of production have not yet established themselves to any notable extent.

The Gold Bearing Area of the United States.—For convenience we will classify the gold bearing area of the United States—one million five hundred thousand square miles—in tiers of States and Territories, thus:

First Tier.—California, Oregon and Washington, on the sea front of the Pacific, with a coast line of one thousand five hundred miles.

Second Tier.—East of the above, Nevada and Idaho.

Third Tier.—East of these, Arizona, Utah and Montana

Fourth Tier.—And east of these again, New Mexico, Colorado, Nebraska and Dacotah.

Arizona, Utah and Montana lie longitudinally along the middle of the great Plateau. The other tiers lie upon the two Cordilleras and their outside flanks.

The first tier—California Oregon and Washington—bestrides the whole length of the Cordillera of the Sierra Nevada, including its slope to the Pacific sea This tier has its outlets by the Columbia river into the Pacific, and the Colorado river into the Gulf of California. The city of Francisco is the focal point of business activity for this tier.

The second and third tiers—Nevada, Idaho, Utah and Montana—cover the area of the Plateau, lie on a comparatively dead level, inside the two Cordilleras, having no important slope in either direction.

The fourth tier—New Mexico, Colorado, Nebraska and Dacotah—bestrides the great Cordillera of the Sierra Madre and its eastern slope to the Great Plains, whence the rivers descend to the Mississippi This whole eastern front connects uninterruptedly, across the basin of the Mississippi, to the city of New York, which presents itself as the convenient focus to which all lines of transit from this direction naturally converge.

Auriferous Area Converging to the Pacific or San Francisco.—The average energies of production on the western side of the continent have, we say, their converging point at San Francisco. This region may be estimated to contain an auriferous area of about five hundred and fifty thousand square miles, or reduced to acres, distributed as follows:

| First tier. | Acres. |
|---|---|
| California | 120,948,480 |
| Oregon | 60.975 380 |
| Washington | 38,401,128 |
| Total | 221,324,968 |
| SECOND TIER. | |
| Nevada | 54,690,569 |
| Idaho | 62,525,528 |
| Total | 117.216,088 |
| First tier added | 221,324,968 |
| Grand Total | 338,541,056 |

The population of this division may be estimated at one million and a quarter. Nevada and Idaho must be regarded as immediately identified with and dependent upon the Pacific front, and as ancillary to San Francisco. The first lodgment in this wilderness was made in 1848, and it has had its origin and creation within the space of fifteen years.

Forms of Transportation West.—The forms of transportation within this area at present consists of ordinary roads, navigable rivers and the sea.

Precious Metals Produced, Exported, etc., within Fifteen Years.—The aggregate amount of precious metals produced within the area above mentioned during the past fifteen years is carefully estimated at one thousand seven hundred and fifty millions; of which one thousand two hundred and fifty millions were exported to distant countries, domestic and foreign, and five hundred millions detained for employment, the laying out of cities and towns, the construction of public buildings, and public improvements generally. This estimate, of course, includes the amount of precious metals carried off in the hands of passengers, and through other channels not covered in the official reports of the amount exported.

In this estimate, it will be remarked that we have confined our calculation to the amount produced on the Pacific coast and the region sloping toward it, and not including the amount produced by the auriferous mountains to the eastward, the Sierra Madre, a portion of the great plateau, and all the territory sloping toward the Mississippi basin. Nor have we embraced the amount produced in the more Eastern or Southern States; the State of Georgia, for instance, where the Dahlonega mines have been successfully worked.

AURIFEROUS AREA CONVERGING TO THE ATLANTIC.—The third and fourth tiers of these longitudinal gold bearing regions, viz: Arizona, Utah and Montana, and New Mexico, Colorado, Nebraska and Dacotah, have a superficial expanse of something near one million square miles, or in acres, at a rough estimate, distributed as follows:

| THIRD TIER. | Acres. |
|---|---|
| Arizona | 78,550,680 |
| Utah | 68,396,560 |
| Montana | 83,368,704 |
| Total | 230,316,944 |
| FOURTH TIER. | |
| New Mexico | 77,008,640 |
| Colorado | 67,723,420 |
| Nebraska | 49,233,920 |
| Dacotah | 62,526,528 |
| Total | 257,492,608 |
| Third tier added | 230,316,944 |
| Grand total | 487,709,552 |

This vast gold producing area has its focus of convergence at New York city. All the commerce of New Mexico, Colorado, Utah, Montana, Nebraska and Dacotah and the bulk of that of Arizona, radiates to and from the city of New York.

FORMS OF TRANSPORTATION EAST.—The forms of transportation within this region traverse the whole area of the United States, and of all the States. They embrace the ordinary roads, the admirable natural roads of the Great Plains, navigable rivers and the entire system of railroads in North America—existing and prospective—passing and repassing through and through a territory occupied by thirty millions of people.

AGGREGATE PRODUCTION OF PRECIOUS METALS IN THE ABOVE REGION WITHIN FIVE YEARS.—The aggregate amount of precious metals produced within the area of the third and fourth tiers has been one hundred and twenty-five millions of dollars. This has been produced within the space of five years—so recent is the date of their discovery and development by the pioneer people, who have had but rude and imperfect means of working the mines, and are, as yet, without the assistance of proper machinery to develop the treasures whose locality they have discovered.

TOTAL PRODUCTION FOR ALL THE TIERS.—The following will exhibit the aggregate amount of precious metals mined in the above gold bearing tiers since the first discovery in 1848 and 1849:

| | |
|---|---|
| First and second tiers | $1,750,000,000 |
| Third and fourth tiers | 125,000,000 |
| Total | $1,875,000,000 |

And it is safe to estimate that within the next two years the aggregate production of the precious metals within the territory above named will reach the round sum of two thousand millions of dollars. This will assuredly be the case now the war has ceased, and half a million hardy and adventurous soldiers, accustomed to the rigors and deprivations of frontier life, are ready to swell the stream of emigration already pouring into the newly discovered gold and silver regions.

MAGNITUDE OF THE AURIFEROUS REGIONS OF THE THIRD AND FOURTH TIERS.—The magnitude and auriferous character of the mountains embraced in the third and fourth or eastern tiers surpasses that of the extreme west or Pacific side. The few years of imperfect development demonstrate this fact. This region presents itself in immediate contact with the tide of American people and foreign immigrants advancing upon its whole front, pressed onward by the whole weight of the Eastern population and the strength of their engines. Such are the extent and natural resources of this eastern front, that they are capable of infinite expansion, limited only by the demand which may exist and the industry and capital which may elect this wonderful and prolific field for practical and permanent investment.

The source of the production of the precious metals, lying within and associated with the prevailing organized system of national commerce and industry, is immediately available to meet the present extraordinary demands upon the national credit, and those consequent upon protracted war and prospective expansion of empire. It must be remembered that this view pertains exclusively to the eastern slope of our auriferous mountain regions, described as having its natural concentric point at and dependent upon the city of New York.

THE PUBLIC DEBT AND A WAY TO PAY IT.—The public debt of the loyal States on the 24th of October last, with interest for the current year added, amounted to two thousand two hundred and two millions of dollars. The interest on this sum that is payable in coin amounts to about fifty-six and a half millions, and it requires one Territory alone—Colorado—to duplicate its present production, in order to furnish bullion sufficient to cover this amount. This startling but indisputable fact must tend to allay any anxiety that may exist in the minds of our people as regards the ability of the government to maintain its credit in the face of almost any expenditure that may be required to render it strong and enduring.

Incidental to this flattering and gigantic expansion, bearing upon the domestic system and home relations of the American people, comes the additional and attractive prospect that these movements are rapidly opening the trail and hastening the advance of our people to the grand arena of the Pacific ocean, its commerce, its navigation and its population.

Beside this, and the excellent economy of arrangement discernible in this eastern system of auriferous mountains, we are gratified at beholding the fact that the proceeds of industry there, in departing for the seaboard, permeate and irrigate, as it were, the whole family of the American people, vitalizing every field of enterprise and industry, and stimulating the populations inhabiting the entire Eastern geographical expanse. If the precious metals arriving from this direction eventually find their way outward to foreign countries, they do not do so until these infinite benefits to our domestic industrial system have been permanently secured.

On this arena are seen combined magnitude of plan, economy of distribution, universal accessibility and ease of transportation, infinite variety of detail, in harmony with the populations and popular energies which they are calculated to arouse and to employ.

SUBDIVISIONS OF THE GOLD BEARING AREA OF NORTH AMERICA AMONG THE COMMERCIAL POWERS.—The following table will present at a glance a summary of the above, and show the subdivisions of the gold bearing area of North America among the commercial powers:

| | Area sq. miles. | Population. |
|---|---|---|
| German America (Maximilian) | 358,547 | 7,529,616 |
| French America (Napoleon III.) | 405,273 | 953,616 |
| American America (United States) | 1,250,000 | 1,250,000 |
| British America (Queen Victoria) | 200,000 | 61,000 |
| Russian America (Alexander II.) | 300,000 | 27,000 |
| Total | 2,513,840 | 9,821,332 |

The following table will show the

TOTAL AND AVERAGE ANNUAL PRODUCTIONS OF THE GOLD BEARING AREA IN NORTH AMERICA.

| | Average annual. | Total. |
|---|---|---|
| Mexico (346 years) | $19,250,000 | $5,640,204,889 |
| United States and Territories | 100,000,000 | 1,874,000,000 |
| British America | 2,500,000 | 7,000,000 |
| Russian America | (Undeveloped.) | |

GENERAL CONCLUSIONS.—From the above exhibits may be obtained a comprehensive view of the general attention given by commercial nations to the development of the precious metals on this continent, as the source from which the bulk of supply is to be derived in the future. This has already resulted in an attempt to partition out largely among the European Powers all the gold bearing area of North America not positively embraced within the sovereignty of the Union. Although the greatness of area and the advantage of position held by the United States give to her the undoubted supremacy should this productive system become permanent, we are urged to increased energy in the development of our own area, augmented by the rivalries incidental to the approximation of so many foreign nations. The rapid growth in volume of the commerce of the Pacific ocean is perpetually exacting a corresponding increase in the specie basis of the whole field of commerce. The area which develops itself within the domestic control of the American people, to meet this indefinite expansion, is amply munificent to flatter their largest ambition and to meet the horizon to which their stimulative energies may urge them on. The universal popularity among the American people of non-interference in the domestic affairs of the New World warns us to regard with increased vigilance the political maxims laid down by Monroe, and re-asserted by every sound statesman of America, North and South.—*New York Herald, June 12.*

## HON. JAMES H. HOYT,

SUPERINTENDENT OF THE NEW YORK AND NEW HAVEN RAILWAY.

Hon. James H. Hoyt is the Superintendent of the New York & New Haven Railway, which responsible position has been filled by Mr. Hoyt since 1854. As we remarked in a previous number of the *Guide*, there is nothing that affords us more pleasure than to have it in our power to record from time to time the works of such men while with us. It is the example of energetic, active, determined, *living men*, that our young men who are about entering the busy scenes of life look up to; and it is an uncontroverted fact, that their example has its influence upon all thinking and reflective minds.

Mr. Hoyt was the fourth son of William and Sarah (Wood) Hoyt, of Stamford, where he was born, April 14, 1809. His father was a farmer, and his early educational advantages were those of our ordinary New England farmers. He was kept in the district school of his native village until he was eight years of age after which he had to depend for his education upon the winter school alone. At the age of 17 he was apprenticed to the cabinet-making business, and at the close of his minority he took the business of his former master into his hands. He soon connected with this business the lumber trade. It will illustrate his enterprise thus early in his business life, that while engaged in this trade, he imported the first cargo of hard coal ever brought to Stamford.

In 1831, the canal extending from the harbor up into the centre of the village was opened. Mr. Hoyt united his business with

the dry-goods and grocery trade of his two brothers, William and Roswell. The new firm leased the canal for five years, and carried on an extensive and various business. They purchased shipping and did their own carrying trade, and imported their own West India goods. In this business he continued with varied success until the expiration of their lease, when he resumed the lumber trade, in which he continued until the New York & New Haven Railway was projected. In the building of this great thoroughfare, he entered into contracts for grading portions of it, building bridges, and furnishing ties. All of these contracts were promptly and acceptably executed. One of them, that in which he engaged to furnish the ties for the entire track, was the one which most tested his business capabilities. In company with Mr. Edwin Bishop, both of them unused to such business, he had obligated himself to have the entire 150,000 ready at a given date. It soon was seen that their sub-contract must inevitably fail to furnish the ties according to the contract. In this emergency, Mr. Hoyt started off with a gang of men, found a tract of suitable woodland in Sullivan county, Penn., and by his energetic superintendence fulfilled the contract and established his character for great thoroughness and efficiency in business. On the completion of the road, at first built with a single track, he contracted to supply it with fuel, and when the second track was laid, he was a heavy contractor for the work. From this statement it will be seen that Mr. Hoyt, from the very beginning of this great public work until it had fairly established itself as an efficiently managed enterprise, had been connected with it in such ways as to make him familiar with its character and wants. He had enjoyed a good opportunity of watching the management of the road under its chief engineer and first superintendent, Mr. R. B Mason, subsequently connected with the Illinois Central Railway; and also under its second superintendent, Geo. W. Whistler, Jr. That he had not neglected the opportunity thus furnished him is evidenced in the unanimity of the choice which called him to the superintendency of the road, on the resignation of Mr. Whistler in 1854. Still better evidence has been furnished in the increasing success which has attended his administration during the eleven years he has held this onerous and responsible post.

His entrance upon the office was signalized by a sudden blow, which, under a less efficient administration, would have doomed the road to a partial or total suspension. But despite the extensive Schuyler frauds, and the preceding catastrophe at the Norwalk bridge, the stock of the road had steadily risen from about 90, its market price when Mr. Hoyt entered upon its superintendency, to over 150. Nor is it more than the truth will warrant, to affirm, that to no one who has been connected with the road from its opening to the present time is this advance more certainly due than to Mr. Hoyt. His unwearied care and painstaking devotion to the interests of the road from the time of his first contract; his minute attention to the least defect, whether in the road bed, or bridges, or rolling-stock, or in the habits or manners of the employes on the road, with his prompt remedy for it, or as faithful and prompt a reference of it, if not within reach of his authority, to the board of directors, have made him one of the first among our eminent railway superintendents.

But especially has his considerate and gentlemanly treatment of the employes of the road been a marked element in his great success. No one can have traveled much over the road without noticing the respect and affection with which his subordinates uniformly treat him. Having himself been a hard worker, and always at his post, he knows how to appreciate a like fidelity in them. He is exacting of them all, to the extent of their personal duty; and when this is met, he knows and awards what commendation is due; when neglected, he knows what correction to apply. He discharges promptly an unfaithful assistant when the offence is proved; yet the humblest man in the service knows that there will always be fully opportunity given him to establish his right, if he has it, to his place.

With such qualifications it is not to be wondered at that Mr. Hoyt has always been one of the most popular of superintendents. Nor is this statement of his last report altogether inexplicable: "During the past eight years, ending March 31, 1864, 8,784,318 passengers have been conveyed over this road without causing the loss of a single life or limb to any passenger."

The successive annual reports of the board of directors to the stockholders have borne unequivocal testimony to their appreciation of his services In their last year's report they thus introduce his annual report to the notice of the stockholders: "You will read with interest the report of the general superintendent, Jas. H. Hoyt, Esq., to the board, giving a full review of the transportation department under his care; and it affords us pleasure to state, in bringing this report to your notice, the very satisfactory manner in which the duties of this department, as well as others of the Company, have been performed during the past year."

Mr. Hoyt has received many testimonials in evidence of the esteem in which he is held as the general superintendent of the road with which he has become identified, among which was a New Year's present of 1864. Some two hundred of the employes and their friends visited Mr Hoyt at his residence, accompanied by Mr. E. S Quintard, the assistant superintendent, and presented to him an elegant silver service.

In his private life Mr. Hoyt is eminently a domestic man. His home, when not in his business, is emphatically in the bosom of his own family. He married, January 31, 1838, Sarah J. Grey, of Darien, and they had five children, three of whom are now living. It was a very severe stroke which recently bereaved him of his wife. He had entrusted to her the entire administration of his domestic matters, because his official duties required all of his strength. He only asked, what in the stress of his care and responsibility he so much needed, a quiet and restful home, in which he could find the repose that should refit him for his work. And it was just such a home that he found, under her administration, always ready to welcome him.

In politics Mr. Hoyt has always been with the Democratic party. Though not an aspirant for office, he has represented his native town and his senatorial district in the State Legislature He was a principal mover in the organization of the Stanford Savings Bank, of which he has been for several years the president.

As a practical business man, Mr. Hoyt stands among the first of his townsmen. He has reaped the rewards of his earnest and honorable enterprise, both in a most excellent business reputation, and in the still more tangible token of a handsome worldly estate. —*Appletons' Guide.*

## CLARK'S METHOD OF SMOKE PREVENTION.

With a view to overcome the various objections and difficulties that were constantly arising, D. K. Clark patented an arrangement whereby the volume, range and power of the air-currents are extended, and they are better adjusted to the requirements of the furnace. In this system, small jets of steam are employed in aiding the thorough admixture of the air within the box. The arrangement consists in forming openings in the sides of furnaces in free communication with the atmosphere for the admission of air. Jets of steam are projected through these openings in order to draw the air into the furnace, and to diffuse and mix the air with the combustible gases as they are generated, and so to burn them and economize fuel. When the steam-inducted air-columns are directed upon the fuel, it raises it to a state of intense ignition. Thus smoke is prevented, and a considerable portion of the solid fuel is consumed by the inducted air. There is no construction within the fire box, and consequently no destruction from exposure to intense heat, neither does it in any way interfere with the fire box or the management of the fire, and is governed simply by a steam cock near the driver. The steam nozzles here bear a similar relation to the air to which they are directed as do the blast-pipes to the chimneys; indeed, they may be described as so many blast-pipes and chimneys on a very small scale turned into the fire-box, possessing in a relative degree the power of urging the draught. The various currents of air by direction of the steam are delivered with such correctness and force as to range over the entire surface of the burning mass in the furnace. The air is thus forcibly mixed and distributed amongst the gases and the result is a perfect prevention of smoke. It is found in practice that the jets are not required to be kept constantly in use, their occasional action being quite sufficient to insure all the benefits derivable from the application of the system when the engine is at work. They are chiefly called into requisition when the fire has just been coaled, or when steam is shut off at stations, in which cases, and especially the latter, were it not for these steam inducted air-currents, smoke must inevitably be formed and escape from the chimney. As the heat in the fire-box becomes modified in intensity, the jets may be turned partially off, and when the engine is on her way again their action may be altogether dispensed with. If the areas of the air-holes are properly proportioned, they require no regulators, that is, if they are not made too large so as to admit an excess of air.

On the Great North of Scotland Railway, Clark's system of smokeless coal-burning is in full operation; all the engines being fitted with it. Mr. Cowan, the locomotive superintendent of this line, examined and tried most of the systems in use for the purpose of preventing smoke in locomotives, but he appears to have found none so simple and efficient as Clark's, which he accordingly adopted It is used daily on his line as a damper whilst standing; this feature, which is of the utmost importance in practice, is peculiar to Clark's system alone. By the use of it properly, Mr. Cowan states that an engine could be kept standing twelve hours, or even longer, and the steam not vary a pound up or down, and yet three minutes would suffice for the engine to be ready for a journey. In a paper read by

Mr. Frederick Young, before the Society of Engineers, the results of working of various plans in general use are given, and a comparison certainly affords a satisfactory proof of the economy and efficiency of Clark's system. In a trial of McConnell's, Beattie's and Cudworth's plans, with engines and tenders of nearly equal gross weights, speeds nearly equal, and trains of 100 to 116 tuns, the coal consumption was as follows: McConnell, 36½ lbs Hawksbury coal per mile, 31 lbs. per tun gross. Beattie, (cold water,) 24 lbs., Griff and Stavely, per mile, 235 lbs. per tun gross. Cudworth, 26 lbs. coking coal per mile, 225 lbs. per tun gross. When tried in passenger trains by Mr. Cowan, on the Great North of Scotland Railway, against those plans adapted to the ordinary fire box, such as that of Mr. Douglas, of the Birkenhead line, with a close deflector; Mr. Yarrow's, of the Scottish North Eastern, with a brick arch and air-bars; Mr. Connor's, of the Caledonian, with a brick arch and door deflector; or Mr. Friedsham's, as used on the Great Eastern Railway, by Mr. Sinclair, and which has a door deflector and steam roses in the fire-box, the results obtained were as follows: Douglas, 90 tuns, gross weight, gross coal per mile 28 4 or 32 lbs. per tun gross, Welsh coal used; Yarrow, 86 tuns, 25 7 per mile, Fifesbire coal. or 32 lbs per tun gross; Connor, 88 tuns, 22 2 per mile, Lanarkshire coal, 26 lbs. per tun; Frodsham, 93 tuns, Stavely coal, 23-3 per mile, 25 per tun; Clark, 110 tuns, 21-0 Fifeshire coal per mile, 19 per tun; from which it will be seen that with the last system, or that of steam-inducted air currents forcibly mixed with the gases, better combustion was obtained, and less coal used with a heavier train, than by any of the others. Similar results followed from the working of goods trains by the several systems. The Great North of Scotland line has long gradients, several varying from 1 in 100 to 1 in 150, with frequent curves, and the goods engines take up these inclines 35 fully loaded wagons of 460 tuns gross weight, at 10 miles an hour.—*Mechanics' Magazine.*

## SOUTHERN RAILROADS.

After the Amnesty Proclamation, which is the most important matter now attracting the attention of the people of the South, the next question of importance is the railway communication. In the language of the Macon *Telegraph*, "the South is bare of goods—the people destitute of the ordinary appliances of comfort and convenience which they had before the war. It is true this destitution has come upon us so gradually and existed so long, that we have ceased to feel it as we should once have done; but when the reintroduction of goods, wares and merchandise once begins, then we shall begin *pari passu* to discover our destitution and our necessities. We have discovered that we are without good agricultural and plantation utensils, and very short of mechanical stock and implements—clothing scarce and scanty—furniture dilapidated—crockery broken—libraries out of date—school-books worn and worthless—in short, that which ever way we turn there is a peremptory demand for reinvestment."

Railway communications being so badly broken up, it is much to be feared that the additional freight expenses before they be repaired will be nearly as costly as the repairs themselves. The Central road of Georgia is so badly injured that it is doubtful whether it will be in full operation in a year's time. Mean while the enormous supplies necessary for this depleted country must, as things stand, either be brought down through Louisville, Nashville, Chattanooga and Atlanta, or from Savannah up the river to Augusta, from Augusta to Atlanta by rail, and thence down, or they may take the more precarious route by steamer to Darien, and thence up the Ocmulgee; or they might be shipped to Apalachicola, and thence up the Chattahochee and Flint, to Albany, or from Apalachicola to Fort Gaines or Columbus, and thence over the Southwestern and Muscogee Railways.

If it were possible to force through immediately the track lying upon that part of the Milledgeville and Augusta Road, which is already graded between Milledgeville and Mayfield, it would shorten the railway transit of goods via Savannah about 200 miles.

In this state of affairs that section of the South immediately below this point must look to the Northwest for its supply of food, its articles of comfort, both personal and mechanical, and for its stocks of goods, agricultural implements, and in fact, every thing that a civilized people need. With the completion of the Atlantic and Western Road, between Chattanooga and Atlanta, these supplies must begin to go forward, and Atlanta will in a short time become the depot for the State of Georgia.

On this road the Etowah River Bridge is burned, and from there to the Chattahochee River the road is entirely destroyed, requiring the rebuilding of the superstructure. The Chattahochee River Bridge is also burned, and will have to be entirely rebuilt. Timber for both of these bridges is now being got out, and it is believed that trains will be able to run through by July 1st. This fact is the more important to Western merchants, because Atlanta has railway communication with nearly a million of people in Georgia and contiguous States, who are to be fed and clothed from the Western marts. Trains from Atlanta run within twenty miles of Montgomery, and there is only one bridge to put up to complete the connection. As the roads from Savannah to Macon and Atlanta can not be repaired in less than five or six months, the route from the northwest through this city is destined to be crowded with freight and travelers.—*Chattanooga Gazette.*

## THE PACIFIC RAILROAD.

The Pacific Railroad begins to have a little the appearance of a reality. The California end of it now employs 2,300 laborers, 800 of whom are whites and the remainder Chinese. Cars will be running 36 miles from Sacramento, June 14th; 54 miles of the track will be laid by September. One year from July next, it is believed the road will be in operation a distance of 86 miles, carrying it well toward the summit of the Sierra Nevada.

The various eastern branches are being crowded forward as rapidly as can be expected. Forty miles of the branch leading up the Kansas River has been in use for six months, and has been accepted. At least 40 miles more will be completed before snow flies, and perhaps 80.

From Atchison and Omaha the branches are employing an immense number of men, and it is the intention of the managers to have from one to two sections completed this fall.

That the road, when completed, will pay, there can be no doubt. To show the quantity of shipping which the trade to the territories will give to the Pacific Railroad from St. Louis to Kansas City, the St. Louis *Democrat* says that the "returns of the amount of freight forwarded from Kansas City, Leavenworth, Atchison, Nebraska City, St. Joseph, and Omaha, were 36,074,149 pounds in 1860, and the number of wagons was nearly 7,000; and that this record for 1860 may be trebled for 1864, as last year's emigration across the plains was the largest ever known, and the prospect is that a still heavier rush will be made next season."

Taking this statement as true, for 1864 our freights amounted to 144,296,497 pounds. The average cost of transportation has, during the last year, been about 20 cents per pound, and when losses are reckoned, we presume it would be even larger. At 20 cents, the gross amount would be $28,859,209.20; or, in round numbers, nearly $29,000,000. Of course, were the railroad built, freights would be less but the increase in quantity would more than make up for depreciation in price. This sum would more than build and stock the railroad from the base of the mountains to the Missouri River, as it amounts to over $48,000 per mile; and over a level country like the plains, it can not cost more than the sum named, the principal cost of construction being the ties and rails, scarcely any grading being required. Once completed, say to Denver, the entire New-Mexican and Utah trades would come over the route, much of which now comes from other points than those named on the Missouri River. Idaho Territory would also seek her wares in this market. All these would conspire to increase the business of the road.

Again, the facilities for travel would induce to the country both capital and emigration, and these in turn would increase the quantity of freights. It is perfectly safe to calculate that the business of the road would double during the first year.

As soon as a hundred miles of any one of the eastern branches shall have been completed, its western terminus will at once form the eastern terminus for ox, mule, and horse freighting, and the road will thus be made to pay proportionate returns. The local business for the branches east of the 100th meridian will make up for its being divided between so great a number.

Another advantage to be derived from the construction of this road to its builders, is the bonus given by the United States of lands and bonds, which alone are nearly sufficient to construct the road.—*Mining Register.*

## NEW JERSEY RAILWAY.

The last annual report of the New Jersey Railway and Transportation Company sets forth the capital stock of the Company the same as for the previous year: the funded debt was reduced $7,500, and a floating debt of $145,090 was incurred. An additional track from New Brunswick to the junction with the Camden and Amboy Railway, a distance of three and one-third miles, has been laid, completing the double track over the road, and bridges for the whole length of the line, except at the Passaic bridge crossing in Newark. New car shops have been erected at Jersey City, to replace those destroyed by fire at East Newark. An engine house, capable of containing twenty-four engines, has also been erected at Jersey City. Nine first-class locomotives have been purchased and added to the equipment, and eighteen superior passenger cars ordered, of which twelve were contracted for with builders in Jersey City and Philadelphia, and six to be built in the

company's shop. It is contemplated to build a fire-proof bridge over the Raritan river, at New Brunswick, and to make other permanent improvements on the line of the road. These expenditures have consumed the net proceeds of the road and $145,000 added, which constitutes the floating debt. To provide for contingencies the capital stock has been increased to $6,000,000. For this purpose, and for the payment of the floating debt, bonds of the company bearing six per cent. interest have been issued, having ten years to run.

The receipts of the railway show an increase over those of 1863, as follows :

| | |
|---|---|
| From passengers | $240,164 53 |
| From freight | 52,683 21 |
| And a decrease of miscellaneous sources of | 15,841 45 |

The expenditures increased for the same period as follows :

| | |
|---|---|
| Maintenance of road, bridges and buildings | $47,849 04 |
| Repairs of locomotives and cars | 22,277 56 |
| Fuel | 55,889 74 |
| Operating the road and transporting passengers and freight, including office expenses | 68,278 20 |
| Taxes and transit duty | 23,540 11 |

The receipts for the past five years from freight were as follows :

| | |
|---|---|
| 1860 | $101,619 20 |
| 1861 | 81,097 31 |
| 1862 | 110,392 94 |
| 1863 | 161,539 86 |
| 1864 | 214,214 07 |

Nearly four million passengers were transported last year, making a total of about fifty millions who have passed over the road without loss of life or limb to any in the cars. The attention of travelers should be called to this fact, and they should be impressed with the importance of obeying the rules of the company in order to insure their own safety. A. L. Dennis, *President;* F. Wolcott Jackson, *General Superintendent.*

## THE BRITISH SYSTEM OF FORTIFICATION.

After expending several millions sterling on granite fortifications at Portsmouth and elsewhere, the British Government have bethought themselves of testing the value of the works, both as to the strength of their position and the impregnability of their structure. The scope and character of these fortifications are said to be especially due to the military genius of Lord Palmerston, who brings to modern engineering science the experience he acquired in the War Office sixty years ago—whatever that may be. And so well satisfied has the venerable minister been with his scheme of defensive armament at home hitherto, that he has urged its adoption for the protection of the two or three thousand miles of boundary line between the neighboring colonies and the United States. The plans of the main works recommended for Canada, in the report of Col. Jervois, are essentially framed upon the Palmerston "*Portsmouth model.*" There is no particular secret we believe about that model—so far as the British Minister's theory is coocerned. *Granite and bricks* make up the whole thing. And if modern innovation had not brought the steel bolt and the 300 pounder into common use, the Palmerston fort might have been the model for the world.

It is a comparatively small matter, perhaps, to find that several of the most imposing of these new British forts—such as those at Portsmouth—are commanded from different surrounding eminences, because these eminences might themselves be fortified, now that the engineer's error has been discovered But it is rather a more serious thing we take it, to find that *the granite walls with brick backings are no more impervious to the steel bolt fairly aimed from a 300 pounder, than if they were so much stage scenery got up to illustrate the "Fall of Lucknow."* The discovery of this very important fact would, probably, have been made earlier, had our own experience in the business of building and taking forts been available for the British War Office at an earlier date. As it happened, it was only the other day that Lord Palmerston and the engineers of the War Office came to the conclusion that it might be as well before laying out ten or twenty millions more on the granite forts with brick backing, to make some experiments with the new ordnance pieces, to see how the matter of impregnability really stood.

A building, then—corresponding in all essential respects to a section of the new forts—was erected on the marshes near Woolwich. It was constructed of granite, backed with brick, and of the proper thickness to make the test complete. A 300 pounder was used, with a small charge of powder, and a steel bolt, at a distance of 250 yards (equivalent to a distance of 1,000 yards with a full charge). At the first shot the building was shaken and the bricks behind the granite began to bulge out. The second shot made a marked impression on the granite itself, and dislodged the bricks inside, so that the working of the guns in the casemates of a fort similarly constructed would have thenceforth been rendered impossible. The third shot knocked the granite into splinters, in all directions, and the extemporized fort began to topple.—*New York Times.*

## MONETARY AND COMMERCIAL.

The universal celebration of the Fourth of July, combined with the intense heat, has had its legitimate influence on every character of business, and the general report is, "but little doing." The bankers have plenty of money, and are perfectly willing to lend it to those in whom they have confidence at 8@10 per cent. The gold excitemeet has lost its interest, the chances being scarcely sufficient to render the game interesting; the operations being mostly confined to those who have got in the habit of it, and can't help it. Opportunities for making a "big thing" in gold are not likely to occur again in some time, and the brokers are trying now to see how much they can do towards swallowing each other up, and no doubt before long, for the lack of other material to operate upon, they will be reduced to the necessity of endeavoring to imitate the custom of the toad, and skin themselves. The operation would, no doubt, afford amusement to disinterested lookers on, as well as exhibit a new feature in natural history.

Exchange is in good demand, and balances are generally low. The following are the quotations :

| | | |
|---|---|---|
| N. Y. Exchange | 50@75c. | 1-10 prem. |
| Philadelphia | 50@75c. | 1-10 prem. |
| Boston | 50@75c. | 1-10 prem. |
| Baltimore | 1-10 dis. | par. |
| Gold | 37½@38 prem. | 40c. prem. |
| Silver | 25@28 prem. | 28@30 prm. |
| Vouchers, city | 2@3c dis. | |
| Vouchers, country | 5@15c. dis. | |
| Certificates | 1c. dis. | par. |

In the New York market money is very easy, says the *Tribune*, at 4 @5 per cent., and the supply of loanable funds is largely in excess of the demand.

Government bonds were very steady with no transactions to note, holders are looking for an advance and do not care to sell at quotations. The closing quotation for old 5-50s was 104½@104¼; new, 104@104¼; coupon, 10 20s, 97½@97¾; miscellaneous shares were strong : Quicksilver, 53; Cumberland, 41¾; Atlantic Mail was in general demand, and sold at 154½, cash, and 155 buyer 30.

The railway share market opened strong on the street, and stocks were in active demand for cash. At the board prices were fully sustained, with very large transactions on the leading shares; but prices reacted from ¼@¾c. after the board. In the street the market continued strong, and Erie, Reading, Michigan Southern and the North-Western shares were in active demand, with but small lots offering. The feeling appears to be on the increase that after the holidays are over the market will be much more active, and the desire to buy is quite strong. Stocks continue scarce, and deliveries are made with much difficulty; and as long as money continues to be hawked about the street at four to five per cent. interest without finding customers, it would appear as though the bears would have much difficulty in breaking the market further. Speculators for a rise are beginning to notify their brokers to hold their stocks, and this accounts for the difficulty of borrowing many of the active shares, and cuts of a nice revenue that many brokers have had from lending their customers' stock at one-sixteenth to one-eighth per cent. per day. Later in the day the market was strong. The closing quotations were : New York Central, 94¾; Erie, 79⅝; Hudson, 108⅞; Reading, 97⅝; Michigan Southern, 62¼; Rock Island, 101¾; Cleveland and Pittsburgh, 69¼.

Striking Oil in California.—*San Francisco June* 12, 1865 —The first oil well has been opened in Humboldt county, at the depth of eighty feet. The flow is small—say twelve barrels a day—but the parties interested believe it will increase rapidly as they proceed deeper. Humboldt county is in the extreme northern part of the State.

*San Francisco, June* 13.—The first shipment of 120 gallons of crude petroleum from Humboldt Co. arrived at San Francisco.

Generous Donation.—The Pennsylvania Central R. R. Co has given $50,000 for the foundation of a Pennsylvania Soldiers' and Sailors' and Orphans' Home, and the State has added $75,000.

# COUPON AND LOCAL TICKETS!

## CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

**CONSECUTIVELY NUMBERED**

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

***Ticket Agents and other Railroad Men are invited to call and see our work.***

**WRIGHTSON & CO.,**

*No. 167 Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD.


## GOVERNMENT TRANSPORTATION.

GENERAL ORDERS No. 17.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., March 16, 1865.

1st. For the purpose of producing uniformity in the Transportation service and guarding against abuses, blank books of Transportation Orders will hereafter be issued from this office to the Chief Quartermaster of each Department, to be by him immediately furnished to each officer under his order entitled to issue the same; after the receipt of which no other form will be used, unless in emergencies when the prescribed blank form cannot be had, and then the reason for not using it must be stated in the order.

These blank orders will be numbered and registered in this office in such manner that there will never be two orders of the same number in circulation; they will be charged to the Chief Quartermaster to whom sent, who will in like manner charge and hold responsible his subordinate officers.

On exchange of posts, or on transfer to another officer, like receipts must be taken and forwarded to the Chief Quartermaster of each Department.

2d. Within five days after the end of each month, a concise report will be made to the Department Quartermaster of the number of orders issued, the number cancelled by error (which must accompany the report), and the number remaining on hand, with a statement of the amount of transportation furnished in the month; which report in a condensed form (accompanied by the orders so cancelled) will be by him immediately transmitted to the Quartermaster-General, under envelope, endorsed on margin "Rail and River Transportation."

3d. The marginal register should contain the substance of the order issued and will be preserved by the officer issuing for his own protection, or return to the Department Quartermaster or this office, as may be hereafter required.

*Care should be taken at all times to keep on hand a sufficient supply of these blank orders*, which can be obtained upon application to the proper Senior or Department Quartermaster.

4th. Unless in extraordinary circumstances, all rail and river transportation, passenger and freight, at any post, will hereafter be under the control and management of a single officer, on whom requisitions will be made by other officers requiring transportation.

5th. When more than five persons, in one party, are to be transported over one road, or a continuous line of roads, separate orders for transportation must be issued for each road to be passed over. These orders should be received on the train instead of tickets, and are to be receipted by the party named in the order, and given up on the cars—the officers, or persons in charge, filling the receipt with the number actually carried. Five persons, or a less number, may be carried over a continuous line of roads upon a single order for transportation, and this order may be exchanged at the starting-point for tickets over the entire route.

6th. Settlement should not be made nor vouchers given to railroads on orders for passenger transportation properly belonging to other roads, but the *passenger* accounts for each road should be made up separately in the name of the roads to which they belong.

7th. Appletons' Railway Guide for January, 1865, will be used as a standard for indicating routes and fixing distances, unless the actual distance is proved to be less, in which case settlement will be made on the basis of actual distance. Where this Guide cannot be more readily procured it can be furnished from this office.

8th. When a number of troops are to be transported from any point to any other point, on the same day or train, it should be done in squads as far as practicable. A single transportation order, or set of orders, should be given to the ranking officer, or most responsible person of the several detachments.

9th. Blank books of Free Transportation Orders will also be furnished, to be used on boats belonging to, or in the service of, the Quartermaster's Department, or on railroads operated by the Government. The free passes in these books will be given to persons entitled to receive Government transportation, and should not be issued without designating on the order the boat or road on or over which the person is to be transported. The marginal registers in these books will also be preserved for return to the Department Quartermaster, or to this office, as may from time to time be required.

Should the route to be traveled be in part over roads or on those owned by private parties or companies, care should be taken that Free and Pay Orders are given as the case may require, or such requisitions furnished as will enable the party entitled to transportation to procure it at points where pay transportation commences.

10th. To warrant the granting of transportation, except in cases specified by Regulations or General Orders, published for general information, the person demanding the same should show a requisition or order from competent authority requiring the movement by public conveyance in the performance of public duty.

The original requisition, when not necessarily required by the officer presenting it, should be retained by the officer furnishing the transportation; in other cases, a certified copy or necessary extract from the order should be furnished to, and preserved by, the officer granting transportation as his proper authority therefor, and a certified copy of the same must be endorsed on the back of the order.

11th. When the cost of transportation is to be reimbursed to the Government, as in the case of sick and furloughed soldiers, the required certificate should not only be made upon the furlough or order, but the transportation order should also be endorsed on the back substantially as follow: "The within transportation, furnished under General Order ——, and the proper officers duly notified. ——— ———, A. Q. M."

12th. When transportation is granted to persons not in the military service, full explanations therefor should be given

13th. Orders for transportation should give the name of the party to be transported, or if there are several, then of the officer in person in charge, and state the number of men to be transported.

Orders for "one man," "ten men," and the like, without designating any name, are improper

14th. The receipts for transportation should be filled up in ink by the officer or person named in the order before signing, and if he cannot write his name, there should be a witness to his mark.

Names and places should be written distinctly in full, and not abbreviated.

15th. Duplicates of orders for passenger transportation should not be issued

16th. When a requisition calls for transportation to any given point and return, the order should be issued to the place of destination, and the return transportation should be obtained at that point, provided it can there be procured.

17th. Upon the form of order now issued should be presented all the facts necessary to enable an auditing officer to decide as to the regularity or propriety of the order, so that it may be paid by any authorized disbursing officer.

18th. Erasures, interlineations, or alterations, if made against the interest of the Government, should be explained on the order by the issuing or other competent officer; otherwise, the transportation should only be settled for in accordance with the order before change or modification.

19th. Transportation by water being generally the cheapest should be selected when consistent with the interests of the service. All transportation should be furnished by the shortest practicable route, unless a different route is indicated in the order which directs the movement. Where there are two or more competing routes without material difference in distance or time, the business should be divided in equitable proportion between them, the distance for which compensation is made being estimated by the shortest practicable route.

20th. In no case is subsistence furnished by the Quartermaster's Department.

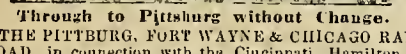
21st. The good of the service requiring that railroads should obey the requisitions of officers properly authorized to demand transportation, in case compensation is made by the Government for illegal or unauthorized transportation so required, the officer making the requisition or issuing the order will be charged therewith, or if not paid by the Government, the railroad will be entitled to recourse upon such officer

By order of the Quartermaster-General.

LEWIS B. PARSONS.

*Colonel, and Chief of Rail and River Transportation.*


## The Old And Reliable Route.



**Through to Pittsburg without Change.**

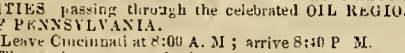
THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

## MONDAY MORNING, MAY 8,
THE
## Atlantic & Great Western Railway



WILL COMMENCE RUNNING ONE THROUGH TRAIN between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at 8:00 A. M; arrive 8:40 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, near northeast corner Broadway and Front streets, or at No 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO


## *STEAMSHIP COMHANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | | |
|---|---|---|
| WASHINGTON | 3,150 tuns. | 900 horse-power. |
| LAFAYETTE | 3,204 tuns, | 900 horse-power. |
| EUROPE | 3,250 tuns, | 900 horse power. |
| FRANCE | (afloat). | 900 horse power. |
| NAPOLEON III | (float). | 1,100 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine) ..... $135.
Second Cabin (including table wine.... $70 or $80.

Payable in gold, or its equivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent.
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

NATIONAL STEAM NAVIGATION COMPANY.
(LIMITED.)
NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building) | 3,412 | —— |
| ENGLAND (now building) | 3,430 | —— |
| SCOTLAND (now building) | 3,430 | —— |
| ERIN | 3,310 | Grace. |
| HELVETIA | 3,315 | Prowse. |
| PENNSYLVANIA | 2,872 | Grogan. |
| VIRGINIA | 2,872 | Lewis. |
| LOUISIANA | 2,166 | Appleton. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to
WILLIAMS & GUION, No. 71 Wall street.
For steerage passage apply to
640* WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN | $90 00 | STEERAGE | $30 00 |
| First Cabin to London | 95 00 | Steerage to London | 34 00 |
| First Cabin to Paris | 105 00 | Steerage to Paris | 40 00 |
| First Cabin to Hamburg | 100 00 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE.
The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel Steamship

GUIDING STAR ..... 2,595 60-95 tuns.
WILLIAM R. BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

| | |
|---|---|
| First Cabin Passage | $150 |
| Second Cabin Passage | 60 |

Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge

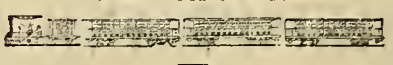
The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
640* JAMES A. RAYNOR, No. 10 Barclay street.

## CENTRAL RAILROAD
—OF—
## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,
Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:30 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:30 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT, 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 5:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex); 3:00 (Ex.); 3:45; 4:30 and 5:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m.; 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.) 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 1:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 8:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7.00; 9:30 a. m.; 4:30 p. m.

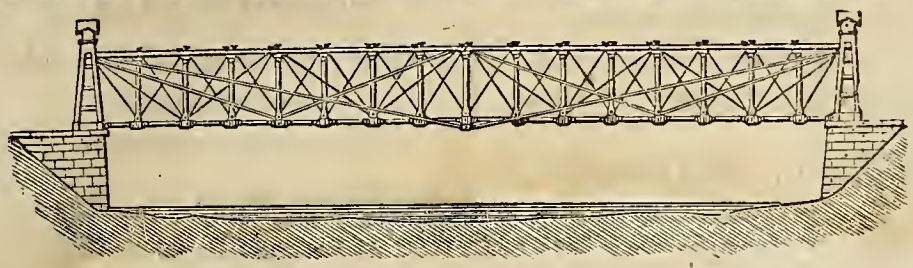
Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD
Trains for Albany, Troy and Saratoga Springs, (in connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m., and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*

## FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5. '53 ly. Letter Box, 1293. C. J. SCHULTZ, Pittsburgh, Pa

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets of all size, Lag Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27 1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive En. 419 y 1

---

## KNOX & SHAIN,
## Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA.

---

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN,

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

Either Single or Double Plate,

With or Without Axles.

**WHEELS FITTED**

To Hammered or Rolled Axles,

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

## Manufacturers, Importers & Dealers

—IN—

**RAILROAD, CAR,**

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

**MACHINERY OF EVERY DESCRIPSION**

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

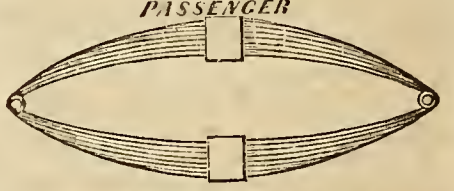
## RAILWAY SPRINGS.

**FREIGHT**





*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledge himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. REWSON,
## STOCK BROKER,

**No. 21 West Third Street,**

**CINCINNATI.**

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washingtnn City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W P. SMITH. *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't. Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express..... | 6 00 A. M. | 7 30 P. M. |
| Mail a. d Express..... | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation..... | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation..... | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express ... ..... | 10 30 P. M. | 10 05 A. M. |

☞Sle ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail..... | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo..... | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation..... | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville..... | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A. M. |
| Hamilton Accommodation..... | 7 30 P. M. | 8 05 A. M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St, Louis and Cairo Mail..... | Depart. 6:50 A. M | Arrive. 1:00 A. M. |
| St. Louis and Cairo Accommodation..... | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express. ..... | 8:00 P M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.30 A. M. & 8:00 P. M.
Two trains Sunday, leaving at.... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
General Ticke Agent.

W I. GRISWOLD nera' Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

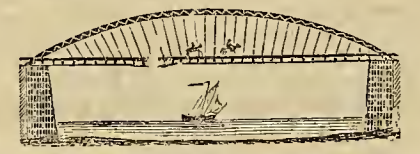
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Snt. 2 MOSELEY & CO.
BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

**Lewistown, Mifflin Co., Penn**

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

**Rebuild and Repair Locomotives.**

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅛ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—¾ to 24 inches in diameter, and branches for same, &c.,

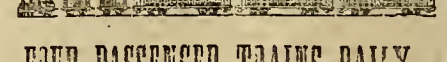
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M night.

On Sundays, 4 30 A M; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East a West

WM. TRARNS Supt

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, JULY 13, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

**SUBSCRIPTIONS—$3 Per Annum, in Advance.**

**ADVERTISEMENTS.**

Square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| *Atlantic & Great Western—* | | |
| | 9:00 A. M. | 7:20 P. M |
| | 10:30 P. M. | 7:30 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:30 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond, Chicago and Indianapolis | 7:00 A. M. | 9:45 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:50 P. M. |
| Richmond and Chicago | 7:00 P. M. | 11:25 A. M. |
| Hamilton Accommodation | 7:30 P. M. | 6:45 A. M. |
| do do | 7:00 A. M. | 8:05 A. M. |
| Dayton Accommodation | 2:20 P. M. | 9:45 P. M. |
| Eastern Night Express | 10:40 P. M. | 7:55 A. M. |
| *Indianapolis & Cincinnati—* | | |
| Chicago and St Louis Express | 7:50 A. M. | 12:00 P. M. |
| Springfield and St. Joe Express | 1:00 P. M. | 5:10 P. M. |
| St. Louis and Chicago Express | 4:00 P. M. | 2:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 4:50 P. M. | 8:35 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:40 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 7:00 A. M. | 9:45 P. M. |
| Connersville, Cambridge City & Indianapolis Express | 3.30 P. M. | 12:50 P. M. |
| *Ohio & Mississippi—* | | |
| St Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A. M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 7:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 8.00 A. M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 6:00 A. M. |
| Evening Express | 2:35 P. M. | 10:12 P. M. |

The trains on the Little Miami and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapoli & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

[From the N. Y. Herald.]

## THE NEGRO AND HIS USES,

AT THE CLOSE OF THE WAR.

COLORED FENIANS—CARRYING THE WAR INTO AFRICA.

We published the other day, for the edification of my Lord Palmerston, the British nation and the readers of the *Herald* in both hemispheres, an analytical, historical and highly interesting synopsis of the great Fenian organization which is to put an end to British rule in Ireland, place "the green above the red" and make the Emerald sle the Eastern State of the great republic. We can spare a hundred thousand Irishmen from our victorious army to finish up that little job in the neatest of styles, without reckoning at all upon the unimported Fenians who never breathed the free air of America. We have a hundred thousand more of our own restless ambitious and wartried braves to step over into Mexico, and intimate to Messrs. Maximilian, Napoleon and Company that they are unwelcome visitors in our poor neighbor's establishment, and that, like Lady Macbeth's guests, they must not stand upon the order of their going, but go quickly. And we have still one or two hundred thousand more of Africa's swarthy sons to do the work allotted to them in these marvellous times—to wipe out the last vestige of the slave trade, to substitute Christianity for fetichism and to obliterate the human sacrifices and other "grand customs" of Dahomey, substituting for them even a rude imitation of the religion, the laws, the agriculture and the social sciences of civilized life. In short, we have solved the problem of "what to do with the negro?" There is a grand work before him. We have all heard of the Dutch having captured Holland. Why should not the negro capture Africa?

Philanthropic England has been making useless efforts for over a century to explore and christianize Africa. She has had her Mungo Parks, and Spekes, and Burtons, and Livingstons to make known to the world the horrible destiny of the untold millions of that vast continent, and she still has, in combination with ourselves, cruisers along the coast to thwart Spanish and Portuguese factors in their nefarious slave traffic. There is a short and effectual way of squelching King Gelele, his Royal Majesty of Dahomey, trampling out the fetich idolatry, with its fearful human sacrifices, giving a deathblow to the slave trade and other African abominations, and bringing that long accursed continent within the circle of civilization. Need we designate it? Does not the idea occur to every mind? Who can fail to perceive that the moment has arrived so long foreshadowed by the apologists of slavery in this country—when Africa is to be redeemed by her own children, who will return enlightened, civilized, trained to agriculture, social sciences, and the military art, able and willing to clear out all the despotic kingly and priestly savages that may stand in their way? An army of white missionaries with tracts and prayer books would be far less effectual in spreading the religion and civilization of Christian lands among the African heathen than a few divisions of colored troops with rifles and cartridge boxes. They are the real civilizers, the only effective teachers that can be sent to "Afric's coral strand.'

What a field is thus open for the enterprise of American citizens of African descent. There are empires to be founded, races to be redeemed from barbarism, a great continent to be brought within the influence of modern civilization. Americans have the honor of having opened Japan to commerce. Let them also have the immeasurably greater honor of clearing away all the barriers to trade with the land of ivory and palm oil, to be converted also into the land of cotton and coffee. It appears to us that, for Africa, "now is the accepted time, and now is the day of salvation." Let expeditions be fitted out, under the direction of our government, of five, ten or twenty thousand men in each, to be landed in the healthiest parts of Africa, there to establish military colonies, to be followed hereafter by hundreds of thousands and millions of peaceful emigrants from the cotton States, as rapidly as these States are filled with white laborers. Our military friends might fraternize with the Amazons; and having the foe thus within their arms, the kingdom of Dahomey, with all its abominations, would fall an easy prey. Fred. Douglas has brains enough, energy enough, and ambition enough to be the Moses of this return to Egypt, to lead his people back to a land flowing with milk and honey, to establish a code of laws for them, and to found a nation that may hereafter rival in greatness the Kingdom of the Pharaohs. If Fred. does not aspire to have the affix of "great" appended to his name, after the style of his Prussian namesake, there are, doubtless, others of his race who would be as well qualified to take the leadership. There will be no lack of valiant men, trained in the Petersburg campaign, to take the part of Joshua, the son of Nun. And as for Aaron, we have many reverend colored brethren—Doctor Garnett, for instance—to be associated in the great work, and to re-perform the miracle of producing a new power that will swallow up all the snakes of African superstition.

We do not mean to be considered as at all jesting in this matter. We are serious, earnest. It is not now the time to discuss the details of the enterprise, but simply to sketch its outline. We have an army, now without employment, of one hundred and fifty thousand colored troops, to whom even the rankest copperhead organs give the credit of bravery and discipline; and we have some loose millions of a colored population who belong, of right, to their motheir country, and about whose disposition wiseacres are vainly troubling their heads. We solve at once these and a lot of other intricate problems on the same dark subject, by proposing to get up an African Fenian organization, whose motto shall be "Africa for the Africans," and helping them to realize that object. We shall then have found employment for our disbanded colored troops, and a home for our homeless colored population. We shall have extinguished the slave trade, put an end forever to human sacrifices in Dahomey and Ashantee, substituted Christianity for fetich worship, which is more than missionary societies could ever do; established the arts of peace over that great continent, and extended the area of republican institutions. Let our watchwords hencefor h be:—Ireland for the Irish, Mexico for the Yankees, America for the Americans, and Africa for the Africans! Ho, for Galway! Ho, for Chihuahua! Ho, for Ashantee!

Above we give a characteristic "fillibustering" article from the *Herald* of July 10th. Mr. Bennett is not so simple-minded as not to be well aware that the ideas he has thus advanced are utopian and utterly impracticable. That the Fenians *may* accomplish *their* mission is perhaps possible, although extremely doubtful; that Mexico may be turned over to the enterprise of the Yankees is not only probable, but may be regarded as almost an accomplished fact, but that any such disposition as the *Herald* proposes can possibly be made of the "elephant" in the hands of the government in the shape of the negro army, we think very few will be willing to admit. The *theory* may be

regarded as admirable by most people, although it may not be original, but to carry it into practical operation will require a good deal more influence than can be brought to its support. The country is too deeply in debt to go into any scheme that might involve two or three thousand millions more of debt, even though the reward should be the "redemption of Africa." Our people, although excitable and enthusiastic, nevertheless occasionally count the cost of outside operations, to stop to see whether they can afford it as a luxury, or whether it can be made to pay as a speculation. We can not perceive that either can be demonstrated.

That something must and should be done for and with the black troops we do not deny. The government owes it to them; but what is that to be, is a question that will exercise the best talent of the philanthropist and statesman. Let it be that which will not only be a positive good to the black man, but also something that we can afford to do. Or in other words, in our present financial condition let us combine, if possible, a speculation with our charity. That the black race of America is not sufficiently advanced in the science of civilization to accomplish the work proposed for it by the *Herald*, even if they could command the means for doing it, we think even the *Herald* will not deny. What then shall we do with them, those who have been and are still in the army? We can not, like white troops, disband them and send them to their homes, for they have none. The sweet ties of home and kindred have been obliterated from their bosoms, and if disbanded they will become wanderers and vagabonds on the face of the earth, without means and with wonderfully few practical friends. Philanthropy that can be expended in breath, especially if occasionally paid for, is abundant, but that which calls for constant and continued sacrifice of cash is more scarce, and would not be sufficient to meet the emergency. But to the question, what shall we do for the negro that shall be a permanent benefit to the white as well as the black race?

The true theory is the same as we have advanced on several occasions before. Retain him under military organization and use him in a semi-military capacity to develop the resources of the country, by pushing forward the grand and absolutely necessary (because essential to the preservation of the integrity and unity of the country) system of internal improvements that has already received the intellectual and financial endorsement of the nation, and instead of having fifty miles of a Pacific Railroad built in a year and a half, let us in the same length of time have the iron pathway stretched from the rising to the setting of the sun, and California be brought as near to us as Cincinnati was to Washington twenty years ago. Our Generals have proven that they can build railroads with black troops, and while the compensation of the black soldier is much higher than he ever received in his his life, and perhaps on the average more than he could make in any other avocation, yet is it infinitely cheaper than we can import laborers from either Ireland or Germany to perform the same work. We need the work done, and we have the means at our disposal to enable us to accomplish it; we will confer the greatest possible benefit upon our own race; we will add physical and financial strength to the country; we will develop the wonderful mineral wealth of our hitherto supposed worthless domain, and furnish the means of paying off the national debt in gold, and will adopt the only rational plan of educating and ultimately benefitting the black man. When the roads are finished, give him a house of his own on the line of the highway that he has built, and he will find profitable employment either in the mechanic art that he has learned, or in the pursuit of agriculture. It is not to be supposed for a moment that the development of the country is to cease with the construction of the great trunk lines; not at all. The country is not finished yet, neither will it be when they are completed. They are merely the scaffolding of the grand structure that is to arise that will dazzle the eyes of the world with its magnificence and grandeur. A network of railroads will eventually cover the western plains and intersect the crevasses of the Sierras, built with the gold of the gulches and quartz hills of the Rocky Mountains, that will ultimately rival the railroad system of the older States. Let the black man, for whose sake the nation has suffered so much, bear his share in this great work, and reap his share of the reward, and then when he has acquired education, and accumulated means, and we are nationally out of debt, we will be willing all to take hold and assist the *Herald* in carrying out its brilliant, philanthropic missionary scheme, and Christianize and develop Africa, by means of organized and intelligent force. First, however, let us prepare the instrument and gather up our resources, lest we fail in the enterprise and become the laughingstock of the world.

## FLUCTUATIONS IN THE VALUE OF CURRENCY AND THE RELATIONS OF GOLD AND SILVER.

There are two classes of economical theorists in this country, who are just now rather straightened to give reasons for their faith. One is those who claim that the prices of gold and other articles depend on the *amount of paper currency issued;* that is, for example, if gold was 20 when three hundred millions of currency were out, it would be 40 with five hundred millions, 60 with six hundred millions, and so on; that with the expansion of paper currency, the price of gold would rise, and with the diminution of currency, it would fall. This is their general theory. The other class are those who think that free trade is best for the country.

The last point we shall not now discuss; but, in regard to the former, the facts following the return of peace, compared with those existing in war, furnished such a striking refutation of the theory that we shall here re-state them, that the whole truth may be seen. Before we give them, however, one or two remarks should be premised.

1. If the idea of these theorists is that there is any school of finance, or any sensible people, who suppose that there is *no difference* produced by the suspension of specie payments; or an unusual and a nominal issue of paper money, they are much mistaken. A thousand dollars in paper, without any present redemption, can not be exactly equal to a thousand dollars in gold, because it has no such intrinsic value as gold. But, we do say that there is no such fact as the rise in the price of gold, in proportion to the bulk of paper money. In other words, the price of gold does *not* depend exclusively, or mainly, on the amount of paper money in circulation.

2. There being given two facts, viz: the suspension of specie payments, and the same bulk of paper money, the *price* of gold will depend on other conditions, and may be, notwithstanding those facts, as fixed, and may be varied very widely by those conditions.

3. One of the most important, is the terms of legislation, under which the currency is issued. For example, suppose the greenbacks were not legal tender; notwithstanding the confidence in the issuer, the government, they would not perform the same office; they would not pay debts, and consequently they must have greatly depreciated.

4. The well known principles of *supply and demand* must have great influence. Suppose there was no demand for gold, in any great amount; in that event paper money and gold would be nearly upon a level; for the paper money would pay domestic debts just as well, and no one would want gold.

With these remarks let us note some of the fluctuations in the price of gold since 1860:

1. From April 1861 to May 1862, gold did not rise above 3 per cent. But in 1861, $60,000,000 in demand notes had been issued; and in February 1862, $150,000,000; and in June gold was 109.

2. In July 1862, $150,000,000 more were issued, and in October gold was 135.

3. On the 31st of June, 1863, the whole amount of government paper had been put in circulation, and in the beginning of 1863, gold got up to 170. Here it ought to have stopped on the theory of the gold mongers. Did it? Not at all. Gold, in its ups and downs, did'nt pay the least respect to the gold theorists. Its price depended upon very different principles, and accordingly we find:

4. In March 1864, gold reached..... 169
" May, " " " ..... 190
" June, " " " ..... 251
" July, " " " ..... 286

This being the highest point reached, let us see when and how it fell:

5. In November. 1864, gold was..... 209
March 30, 1865, " " ..... 150
April 14, " " " ..... 145
July 8, " " " ..... 138

Here we have the facts just as they are. Between July 1864, and July 1865, one year, gold fell from 286 to 138, a difference of 148 in the premium, or in the proportion of 187 to 38, the present premium being only *one-fifth* of the premium in July, 1864. Now what is the cause of this? Has the volume of currency diminished? Not at all. The aggregate amount of currency is greater than in July 1864; yet the fall of gold has been tremendous. It exceeds anything known in the fall of prices.

This is a demonstration, if anything in arithmetic can be a demonstration, that the price of gold did not depend upon the volume of paper money. Nobody will deny that the amount of paper currency is *one* of the elements to be taken into view, when the price of gold is to be determined. But the main cause of the bubble prices of gold during the war was of a wholly different character.

1. War itself has a vast influence on the prices, and over actual values of all products. War produces many unusual and incalculable contingencies. It is uncertain who may be victor in war. It is uncertain how long it may last, and, therefore, how much may be the cost, and the changes on the labor of the people. It is uncertain what legislation may be necessary; and, therefore, how far commerce and industry may be affected. War in itself has a constant tendency to unsettle both prices and values.

2. The value of a currency (paper) which depends on the success and stability of the government must necessarily be affected by the various events of the war. If the war is a small one, which endangers us in no way, the power and stability of the government and the currency of the government will not be influenced by it materially. But in the late civil war there was every element at work, which could be dangerous to a government and a nation. Suppose the rebels had succeeded in dividing the country. In that case, the wealth and population of the country would have been reduced one-third, and no man in estimating the value of government debts could place them as high as before. The timid and the disloyal would both lose confidence in the success of the government; and the latter class would take advantage of every adverse event to discourage the people, and throw doubt on the public credit.

3. Then we have the question of supply and demand, when gold has became merchandise There is a varying demand for practical use, and when that is greater, then the immediate supply,—the price must necessarily rise.

These are the great causes of the variations in the price of gold during the last four years. Of all the elements at work, the increase in the volume of currency was probably the least. The greatest cause was the varying events of the war. Let any one take up the dates in the rise and fall of gold and compare them with the course of military success or failure, and he will see this at once. It is so palpable, that no one can deny it. The hopes and fears of patriots as well as traitors rose and fell with the progress of the war. This was the key which disclosed the mysteries of the currency as well as the state of the country.

[From Cin. Commercial.]

## ARMY STATISTICS.

COLUMBUS, July 7, 1865.

While the work of mustering-out, paying off and disbanding the vetran troops furnished by our noble State to the national armies progresses, we are constantly reminded of the work done and the sacrifices made by Ohio for the Union cause in the recent earnestly-contested struggle. This work and these sacrifices can never be estimated at their full value—a truth that we need feel in no danger of pondering or repeating too often; but there is, nevertheless, a very common desire to know, with some approach to exactness, so far as the same is capable of statement by statistics, what have been the contributions of men—the gifts justly prized most highly—in response to the demands of the Government. Strange as it may seem, there appears to be, at present, no mode of ascertaining this. The historian of fifty, twenty, perhaps even five years hence, may be able to state with some reasonable pretensions to accuracy how many of the hundreds of thousands of gallant sons and citizens of Ohio fell in the conflict on the field, or in the hospital, or of wounds and disease contracted in the patriotic service to which they gave themselves as valuntary offerings, but, at present, little information descending to particulars is accessible. By a strange and almost unpardonable oversight in the legislation of our State through all the many years of conflict and carnage, no provisions were made for an army register that should embody the names of the falled heroes of the war, for the enlightement of cotemporary historians and the general reader. Thus it has resulted, that now, when the fame and memory of many are dear to us as immediate observers of the struggle in which they fell, we are compelled to await the routine of returns yet to be made, and the arrangements of tables yet scarcely intelligently begun, ere we can have before us an authentic list of these names or the facts connected with their participation in the struggle. A few general facts, however, hearing upon the subject are of interest to all who, justly prizing our free institutions, do reverence to the men of our own time, to whom, under Providence, we owe their preservation. From the 15th day of April, 1861 to the 15th of April, 1865. dates which include the decisive features of the contest resulting from the rebellion, there were furnished from Ohio, for different periods of service, varying from three months to three years, 198 regiments of infantry, raised and organized within the State, beside large numbers of her citizens known to have volunteered in military organizations of other States. The cavalry and artillery arms of the service were equally well maintained by Ohio men Perhaps as nearly accurate a statement of the number enlisted and the losses by battle and disease sustainted, as any now accessible, is that of the Township Assessors, reported in accordance with a provision of the law for the relief of destitute families of volunteers. By this report it appears that up to the time when it was made in 1864, 211,794 men had enlisted. It is doubtful wheather this statement included the National Guard. and it certainly could not have included the enlistments made during the greater part of the year immediately preceding the close of the war. Figuring by other data, the estimates of the Adjutant General give a total force from the State of 346.326 prior to December 31, 1864, but this statement includes re enlistments, and of course does not show how many men re-enlisted at different times. At the same time, to this statement should be added the enlistments of the last four months of the war.

But difficult as it is to ascertain how many different individuals from this State did military service in the war, a greater difficulty attends any attempt to get at the number deseased in the service or killed in battle, or who have died since leaving the field from the effects of their service. The Assessors returned the number died in the service at 16,516, and the number disabled in the service at 8 056—a total of killed, died and disabled of 24,572. If we add one-fourth for the period of the war subsequent to the time of making the Assessors' returns, it gives an aggregate in round numbers of over 30,000 as the ascertained loss, approximately stated.

Fearful as these figures are, it is doubtful whether they express the whole truth, and we may learn from them a new lesson alike of the terrible cost of rebellion and the unparalelled devotion to freedom, law and order of the patriotic sons of our glourious State.

The Commissioner of Statistics, in approaching this subject, was continually embarrassed by the wants of suitable reports of losses in the field and hospital, and yet by a comparison of data, accessible at that time, he estimated, the losses of able-bodied men, within a very close figure of the results obtained by the Assessors. Still all these means of arriving at conclusions upon a subject of so general interest must necessarily prove unsatisfactory, and we can only await with such patience as we can command that comparison of the returning rolls of military organizations, with those of the same organizations when they left for the field, which can alone convey a just idea of the facts. In this connection it may be mentioned that the whole number of necessitous families returned by the Assessors, was 29,561, and of persons in such families 97,631; a sad record of the havoc of war even upon communities less directly affected by it.

The following recapitulation of troops furnished for the United States service from April 15, 1861, to December 31, 1864, as shown by the different organizations, is taken from the official report of Adjutant General Cowen:

RECAPITULATION OF TROOPS FURNISHED BY THE STATE OF OHIO FOR UNITED STATES SERVICE

| | | |
|---|---|---|
| 22 Regiments 3-months Infantry, in April, 1861 | 22,000 | |
| 5 Regiments 3-months Infantry, in June, 1862 | 4,513 | |
| Total 3-months Infantry | | 26,513 |
| 2 Companies of 3 months Artillery, in 1861 | | 200 |
| 2 Companies of 3-months Cavalry, in 1861 | | 189 |
| Total 3 months troops of all arms, 1861 and 1862. | | 26,893 |
| 2 Regiments 6-months Infantry, in 1863 | 1,894 | |
| 2 Battalions 6-months Cavalry, in 1863 | 874 | |
| Total 6-months troops in 1863 | | 2,678 |
| Drafted 9-months men, assigned to and mustered in old Regiments in 1862 | 1,796 | |
| 9-months drafted men in 1862. assigned to and mustered in old Regiments in 1863 | 117 | |
| Total 9-months drafted men assigned and mustered | | 1,913 |

| | | |
|---|---|---|
| Recruits for 3-years Regiments, sent to the field up to May, 1862, as per estimate of report for 1862. | 6,500 | |
| Recruits for organizations in the field, in last eight months of 1862, as per report of that year | 24,383 | |
| Original strength of 3-years troops, in new organizations of 1861, 1862 and 1863, 121 Regiments of Infantry | 111,666 | |
| Dennison Guards and Trumbull Guards, Infantry | 194 | |
| | 111,860 | |
| Less men transferred from 117th O. V. I. to 1st O. V. H. A | 500 | |
| Total 3-year Infantry at organization | | 111,360 |
| 8 Companies of Sharp-shooters, for 3 years | 732 | |
| 12 Regiments of 3-year Cavalry | 11,804 | |
| Independent Companies and Squadron of 3-years Cavalry | 652 | |
| Total 3-years Cavalry at organization | | 12,456 |
| 1st Regiment 4-years Light Artillery | 1,800 | |
| 26 Independent Batteries Light Artillery | 3,907 | |
| Total 3-years Light Artillery at organization | | 5,707 |
| 2 Regiments 3-years Heavy Artillery | | 3,793 |
| Recruits of old Regiments in 1863 | | 4,147 |
| Total January 1, 1864 | | 200,452 |
| National Guard in one hundred days, service | 35,982 | |
| Enlistments in U. S. Navy prior to Feb. 24, 1864 | 2,367 | |
| Eleven New Regiments, under call of July 18, 1864 | 11,506 | |
| New Companies, under authority of Feb. 4 | 1 500 | |
| Raised by draft during the year | 16,171 | |
| 13th Cavalry | 830 | |
| 2 th U. S. Colored Regiment | 1,04 | |
| Veterans | 20,616 | |
| Recruits for old organizations of all arms, including enlistments in Navy | 52,326 | |
| | | 142 890 |
| | | 343,342 |
| Excess over all calls during the year 1864, up to December 1 | | 2,984 |
| Grand total | | 346,326 |

But if Ohio has been formost in furnishing men to suppress insurrection against the national authority, she has been equally successful in supplying the officers to command them. The following is an official table of

GENERAL OFFICERS IN UNITED STATES SERVICE FROM OHIO.

| Rank | Name | Date of appointment. | Born in | Appointed from |
|---|---|---|---|---|
| Lt. Gen. | Ulysses. S. Grant | | Ohio, Ill. | |
| M'r Gen. | Irwin McDowell | March 14, 1862, | Ohio, O. | |
| " | Wm. S Rosecrans | March 21, 1862, | Ohio, O. | |
| " | Geo. B McClellan | May 14, 1861, | Penn. O. | |
| " | Don. Carlos Buell | March 21, 1862, | Ohio Ind. | |
| " | Wm. T. Sherman | May 1, 1862, | Ohio, O. | |
| " | Al'x. McD. McCook | July 17, 1862, | Ohio, O | |
| " | Robert C. Schenck | Aug. 30, 1862, | Ohio, O. | |
| " | Jas B. McPherson | Oct. 8, 1862, | Ohio O. | |
| " | David S. Stanley | Nov. 29, 1862, | Ohio, O. | |
| " | Phil. H. Sheridan | Dec 31, 1862, | Ohio, O. | |
| " | James A. Garfield | Nov.—, 1863. | Ohio, O. | |
| " | Quincey A. Gilmore | | Ohio, O. | |
| " | James Steadman | | Ohio, O. | |
| " | eorge A. Custer | | O io, O. | |
| " | Godfrey Weitzel | | Ohio, O | |
| " | George Crook | | Ohio. O. | |
| " | Robert B. Mitchell | | Ohio, Ks. | |
| " | O. M Mitchell | | Ohio. O. | |
| " | J Dolson Cox | | N Y. O. | |
| B'r. Gen. | Eleazer Paine | Sept. 3, 1861. | Ohio, Ill. | |
| " | Wm T H. Brooks. | Sept. 28, 1861. | Ohio, O. | |
| " | George W. Morgan | Nov. 12, 1861 | Penn. O. | |
| " | Mahlon D. Manson | March 24, 1862, | Ohio, Ind | |
| " | Wm. S. Smith | April 15, 1862, | Ohio, O. | |
| " | Cha les Griffin | June 9, 1862, | Ohio, O | |
| " | James M. Tuttle | June 9, 18 2, | Ohio, I. | |
| " | Jacob Ammen | July 16. 1 62, | Va. O. | |
| " | John P. Slough | Aug. 25, 1 62, | Oh.o, C. T. | |
| " | Henry J. Hunt | Sept. 18, 1862. | Ohio. O. | |
| " | E. P. Scammon | Oct. 15, 1862, | Ohio, O. | |
| " | Robert S. Granger, | Oct 20, 1862, | Ohio, O. | |
| " | H. B. Carrington | Nov. 29, 1862, | Con., O. | |
| " | John S. Mason | Nov. 29, 1862. | Ohio, O | |
| " | Wm. B. Hazen | Nov. 29, 1862, | Ver't. O. | |
| " | Wm. H. Lytle | Nov. 29, 1862, | Ohio O. | |
| " | Geo. D. Wagner | Nov. 29, 18 2 | Ohio, Ind | |
| " | E. N. Kirk | Nov 29, 1 62, | Ohio, Ill. | |
| " | N. C. McClain | Nov. 29, 1862 | Ohio, O. | |
| " | Samuel Beatty | Nov, 29 1862, | Penn, O. | |
| " | Ralph P. Buckland | Nov. 29, 1 62. | O | |
| " | John Beatly | Nov. 29 1862 | Ohio, O. | |
| " | Thos. C. H. Smith | Nov 29, 1-62, | Mas. O. | |
| " | Mort. D. Leggett | Nov. 29, 862, | N Y. O. | |
| " | Hugh Ewing | Nov. 29, 1862, | Ohio O. | |
| " | Hadert E Paine | March 13 863, | Ohio, Wis. | |
| " | Thos. Ewing jr. | March 13, 1863. | Ohio, Ks | |
| " | Thos. Kirby Smith | | Ohio, O. | |
| " | Manning Force | | Ohio, O. | |
| " | C. G. Harker | | N. J., O. | |
| " | John W. Fuller | | O | |
| " | S. S. Carroll | | D. C., O. | |
| " | J. W Sill | | O. | |
| " | Ferd. Vanderveer | | O. | |
| " | Chas. C. Walcutt | | O | |
| " | Dan. McCook | | O. | |
| " | Robt. L. McCook | | O. | |
| " | John W. Sprague | | O. | |
| " | Chas. B Woods | | O. | |
| " | James W. Reilley | | O. | |
| " | Wm H Powell | | Ohio O. | |
| " | Robert Allen | | Ohio, Ind | |
| " | Wm. W. Burns | | Ohio, O. | |
| " | Abraham S. Piatt | | Ohio. O. | |
| " | C P. Buckingham | | Ohio. O. | |
| " | Malancth S. Wade | | Ohio, O. | |
| " | Wm Sooy Smith | | Ohio, O. | |

To the above list has been added, since the 1st of January last, the following Brigadier Generals: James J. Robinson, late Colonel 82d Infantry; Wager Swayne, 43d; William B. Wonds, 76th; John S. Mitchell, 113th; B F. Potts, 32d, R. B Hayes, 23d; Robert R. Scott, 68th Breyet Brigadier Generals: Theodore Jones, 30th Infantry; Silas A Stricklaud, 50th; S. J. McGroaty, 61st; J. S. Casement, 103d; J. Warren Kicfer, 110th; John S. Jones, 174th; Dan. W. McCoy, 175th; Edwin C. Masnn, 176th; Willard Warner, 180th; George W. Hoge, 183; H. C. Commager, 184th; T. F. Wilda, 186th; H. D. Kingshury, 189th; Eugene Powell, 193d; Anson G. McCook, 194th; Henry B. Banning, 195th; Charles H. Grosvenor, 18th; Benjamin D. Fearing, 92; Rohert N. Adams, 81st; Moses B. Walker, 31st; W. P. Richardson, 25th; A. C. Parry, 47th; O. V. Rice, 57th; A. C. Voris, 67th; W. L McMillen, 95th; John J. Lane, 97th; Isaac R. Sherwood, 111th; Emerson Opdycke, 125th; Thomas M. Heath, 4th; Israel Gerrard, 6th, and Andrew Hickenlooper. Major General A. V. Kautz and Brevet Major Generals Charles B. Woods and Charles Walcutt.

From the above, it appears that Ohin has been repaesented in the Natinnal armies hy one Lieutenant General, *unum, sed leonem*, twenty full, and two Brevet Major Generals, and fifty-four full, and thirty-one, Brevet, Brigadier Generals.

A proud record is this, in connection with all the brave deeds of the one hundred and ten general officers, and more than a third of a million men, who have upheld the starry banner during the last four years.

B. J. L.

## WHITEHALL PNEUMATIC RAILWAY.

When railways first hegan to invade London they were met on the threshold hy the prohibitory injunction, "thus far and no farther." Not a foot might they advance beyond the suburbs be the necessity what it might. The great point was to compel all railway cnmpanies to keep their termini at a respectful distance from the metropolis proper. The citizens' territory was to he sacredly protected against the intrusion of the iron horse, and the royal prophecy that the map of London would one day he marked with railways as with a gridiron, was to have no fulfilment in fact. But matters have changed since those days, and there is now a growing conviction that the metropolis must be provided with railway accommodation throughout its length and breadth. The establisement of one line led to the construction of a second and third, and for the birth of how many more during this session we may consider these responsible, we know not yet. But the construction and working of railways in the metropnlis must be based upon principles differing widely in the main from those most familiar to us in other lines. In London, railways can not be otherwise than a nuisance if overhead, on the ground level, or in open cutting. Under any of these conditions they are open to many objections, and are in fact inadmissible. Their proper and only place must, therefore, he in tunnels, out of sight and hearing. The general conditions of construction being determined, it remains to decide the method of working. Now it is certain that tunneis can never have proper ventilation, or passengers pure air, so long as the generation of steam is preceded with upon the line. The fire box of the locomotive must be sacrificed to begin with. To do this it has been proposed to use an engine eontaining the necessary volume of water heated sufficiently to produce the requisite quantity of steam to work for a given distance, without any conbustion or generation of gases in the tennel. But the boiler has yet to he made hy which this idea shall he effectuated. Even were this accomplished, there would still he the highly objectionable waste steam blowing off into the atmosphere, saturating it with moisture, and condensing on the surface of the tunnel. But another engineer steps in and recommends the waste steam to he blown into a cast iron pipe between the rails, and therein condensed. But while such plans are maturing, and pending the practical relization of these and similar ideas, let us see to what extent we can avail ovrselves of other sources of power—how far we may travel independently of the direct action of fire and water, under conditions where, as sources of motiou, they are clearly inadmissible.

It is an old notion, and by no means an erroneous one, that the power acquired by atmospheric pressure would realize greater safety, economy and expedition, than that obtained hy the ordinary locomotive. The trial of the system of atmospheric propulsion for fourteen years on the line from Paris to St. Germain, bears witness to the absolute security attending its adoption. We have also had practical experience in this direction on some of our own lines. But the system has failed, and this has been due to the imperfect manner in which it has been carried out. Notwithstanding all that was done to develop the principle, it had to be abandoned, not from any inherent fault or fundamental error in the principle itself, hut because the details of its application were not sufficiently mastered to render it a practical success. To ensure the effectual working of the atmospheric system, tunnels and a piston carriage must he substituted for the old arraugement of tube and traveling piston; such a system of working, for instance, as that in operation on the experimental line at the Crystal Palace. Here a power has hcen developed hy which trains have ascended inclines inaccessible to the ordinary locomotive. This result is obtained from the pneumatic system, which differs materially from the former atmospheric system. By the new method, the train is wholly within the tunnel or tube, hy which arrangement all the difficulties attendant upon working the continuous valve are entirely overcome. Leakage is therehy avoided, and a condiderable further advantage is obtained in working at reduced pressures, and with proportionate economy. With the old arrangement a pressure ranging from 120 to 160 ounces per square inch was required to move the train, but under the new conditions a pressure of not more than 3 or 4 ounces per square inch is all that is necessary. In the Crystal Palace tube the train is moved through a tunnel having an area of 80 or 90 square feet, at the rate of 30 or 40 miles per hour, by

a pressure of only 2½ ounces on the square inch. This propulsion is simply due to the pressure of the air behind the train, so that, in effect, the pneumatic system is but a modified application of the process of sailing to railway trains. The practical utility of this system has been proved not only by the successful working of the trial passenger railway at Sydenham, but also by that of the Pneumatic Despatch Company. It is now to be further tested on a practical working scale, upon a railway about to be made from the Waterloo station across, or rather through, the bed of the Thames to Charing-cross. The bill for this line has not yet been obtained, it is true, but it has passed the House of Common, and it is unopposed in the Lords, so that for all practical purposes it may be acted upon as though it had received the royal assent.

The importance of this system of working railways, and the novel position of the line, justify somewhat more than a passing glance at the engineering arrangements, which will be carried out under the direction of Mr. T. W. Rammell, engineer to the Pneumatic Dispatch Company, and with whom Sir Charles Fox and Son are joint engineers. The new system affords great facility for communication under water. Taking advantage of this, it is proposed to lay a line of tube in the bed of the Thames so as to unite the north and south sides of the river, between the two points embracing the important localities of the Charing-cross and the Southwestern railway stations. According to the Parliamentary plans the line will commence in Great Scotland Yard, where there will be an open station, the level of rails being here about 16 ft. below surface. It will be carried thence by a brickwork tunnel under the Thames Embankment to the river, which at this point is about 1,000 ft. wide Here the line will be continued by water-tight wrought-iron tube, about 18 ft. in diameter, which will be made of ¾-inch plate, and girt at about every 36 ft. with a deep wrought iron rib, to which will be connected lighter longitudinal ribs, also of wrought-iron. The tube will be further surrounded by light ribs of T or L iron, placed intermediately between the larger encircling ribs, the whole forming a stiff net work to strengthen and stay the tube. The outer surface of the tube will be coated to the thickness of 18 in. with concrete, for the purpose of adding weight to the tube. By this plan it will be brought to about the specific gravity of surrounding water, and the ironwork will also be protected. The bed of the river will be devided into four spans of 250 ft. each, by means of three sunk cylinder piers; there will also be two abutment piers. These piers will carry the tube, which is about to be manufactured in four lengths of 250 ft. each. A perfectly practical and satisfactory arrangement has been made for connecting the ends of the tubes, which will be tied down to the piers. Messrs. Samuda have undertaken the manufacture of the tube, and to Messrs. Brassey have been entrusted the laying and other incidental works. From the abutment pier the Lambeth side the line will be continued in brick work under College street and Vine street, to a station convenient for the York road and Waterloo station traffic. The gradients fall from either station to the centre of the river, at which point the line is level for a short distance; the steepest gradient will be about 1 in 30.

It will he seen that the line is intended for local traffic only, and it is proposed, upon the success of the first section being established, to extend the line on the one hand to the Tottenham court road, and on the other to the Elephant and Castle. This will add tenfold to the value of the line, by bringing it into close communication with the Metropolitan Underground Railway at one end, and the Metropolitan Extension of the London, Chatham and Dover Railway at the other. The engine-house will adjoin the station at the Waterloo end, where will be placed the pumping engine for working the line. Although only one main tube is to be used, arrangements have been made by which three trams will be kept working at once. One will be at each station unloading or loading, whilst the third is traversing the line, the time of transit occupying only about a minute and a half. By means of two branch tubes from the main tube to the engine, trains will be driven by pressure to Whitehall, and drawn from thence by exhaustion The carriages, will, of course, be properly lighted and comfortably fitted similarly to those on the Metropolitan Railway. It is reckoned that about thirty trains per hour will be run, and from calculations based upon well ascertained data, there appears to he every probability that the undertaking will prove a commercial as well as an engineering success.

It can not be questioned that the pneumatic system possesses many advantages over the locomotive sytem which specially recommend its adoption on the Waterloo and Whitehall Railway. If this line proves a success, and at present there appears no reason why it should not, the system will, doubtless, receive a very widely extended application. It presents economical features both in construction and working, not obtainable by any other plan. The diameter of pneumatic tube being less than that of a railway tunnel, the lines can be constructed with greater expedition and at less cost. The heavy expenses attending the acquirement of property are greatly reduced if not entirely avoided. In the case of the Whitehall line the construction will not involve the demolition of a single dwelling house, the entire line passing under streets and open spaces. The working of the system, too, is comparatively noiseless; this, and the freedom from vibration, recommend its use where a locomotive line would be prohibited. The dead weight and encumbrance of the engine and tender are at once got rid of, and the service thus rendered more prompt, and better adapted to the exigencies of a short local traffic. All the dangers attending the locomotive system arising from breaking down, collision, or explosion, aye necessarily absent; trains can neither leave the rails, nor meet within the tube. The system also complies with the conditions laid down as those under which alone tunnel lines ought to be worked. It is unattended by the objectionable compound of stifling and humid vapors which Mr. Fowler's best precautions can not entirely prevent on the Metropolitan Railway. Not only is the generation of gases avoided, but the tunnel is completely ventilated by the continuous draught of air through it. The motive power being stationary, the working expenses and cost of maintenance of the line will be very much less than under the ordinary system; the wear and tear of rolling stock may likewise be reduced to a minimum.

The facility with which steep gradients and sharp curves can be worked is evidenced by the Crystal Palace tube, which is constructed with a gradient of 1 in 15 and curves of 8 chains radius; on the Whitehall line the worst gradient is about 1 in 30. Such, then, are the leading advantages of the pneumatic system, the working of which is about to receive practical illustration in a position where are doubtless thousands daily, who would much prefer being whisked across in a minute and a half, for a penny or twopence—which we believe are the proposed fares—to making a long detour over either of the bridges Deducting the halfpenny toll payable on Waterloo and Hungerford bridges practically reduces the fares to a halfpenny and three halfpence respectively. Although the engineering details have been well digested and worked out, and every care has been taken to perfect the arrangements, it may be found advisable to vary or alter these as the work of practical construction proceeds under these novel conditions. But the principle will remain the same, and to it we look with considerable hope for the future working of short lines for local traffic in the metropolis.—*London Mechanics' Magazine.*

## IMPROVEMENTS IN ENGINEERING.

The changes which have been brought about, within the past few years, in the manufacture and working of iron and steel are something almost incredible. It would have been reckoned sheer folly had engineers, even ten years ago, counted upon the general introduction of steel for railway axles and tires; and steel rails were hardly known even three years ago. Krupp's immense ingots were, perhaps, amongst the greatest wonders of the International Exhibition—at least to minds capable of comprehending them; but it is likely that Bessemer's grand discovery—already brought by untiring energy and ready ingenuity to the rank of a large and rapidly growing manufacture—will work the greatest change in our applications of iron. Opinion has already been turned by it from unbelief into a confidence surer than any admiration, however great Even in iron-making by other processes, including the ordinary course of puddling, re heating, and rolling, the progress in respect of the magnitude of the pieces wrought has been very great. It would have been seriously doubted, five or six years ago, whether armor-plates a foot thick, and weighing each 20 tons, could ever be made. McHaffie's malleable castings up to two or three tons weight represent a great step also beyond anything known two or three years ago. This branch of manufacture has been greatly promoted by the improvement in crucibles, those of plumbago now withstanding sometimes a week's work in malleable iron making, and from sixty to ninety rounds in other casting, where one, or two, or three, was once thought very fair. Another extraordinary stride in metal working is that of drawing steel tubes from ingots in the cold state by hydraulic pressure. We know more than one engineer who, until he had actually seen this done, refused to believe that it was even possible. The working of Siemens' regenerative furnaces, although easily understood, is almost as wonderful. It needs no strong prediction to declare that the means which give such a perfect control of temperature without diluting the flame with uncombined oxygen, and which afford so great an economy of fuel, must came into very general use.

What a number of curious inventions have been successfully introduced into railway practice within the last five or six years! The means for burning coal with little or no smoke are, perhaps, the most important, and yet they are so exceedingly simple that one might almost be at a loss to say whether, from a mere examination of a coal-burning locomotive, it differs materially from what was before used with coke. And yet what a long and patient course of scheming and experiment was necessary before it was learned that the brick arch and the few air-holes sufficed for

the required purpose. The time will come when engineers will hold the name of Mr. Charles Wye Williams in high honor, for his long and untiring labors in teaching how simple a thing it is to burn coal properly, and how needless, not to say mischievous, were the contrivances in which, a few years ago, the misapplied ingenuity of "smoke-burners" was so fertile.

To go on with inventions in connection with railways:—Who, upon learning the construction of the injector, would have foreseen that it would work at all? Going a little further back, Eugéne Bourdon's discovery, in his workshop, that a coiled still-worm tended to straighten itself under pressure, led to an invention which has conferred great benefits upon locomotive practice, by increasing the security of working and economizing fuel. How much complication was removed from locomotive pistons by the introduction of Mr. Ramsbottom's slight and wiry rings, which it was believed by many would scratch the cylinders (and, at first, they occasinally did) and never remain tight? Messrs. Millar & Wakefield's steam-packed pistons embody an equally neat idea, but this idea—although we believe it was really adopted in practice by Spiller, of Battersea, twenty years ago—was once pronounced absurd by more than one engineer. Then there are Mr. Adams' radial boxes, which have attained to a thoroughly established success in the face of much and generally expressed doubt. The spring-seated tires, by the same gentleman, have by far outworn tires set in the ordinary manner, and it is clear that what saves tires must save the rails. We do not know that there is any "if" in the way of the success of the spring tires, but even if they have not yet wrought a general change in the opinions of practical men, they have certainly attained of measure of success which, at one time, many would not have been willing to admit as possible. Another successful application which, until the success had been proved, many engineers would have rather ridiculed than doubted, is that of Mr. Ramsbottom's water troughs for "picking up" water into tenders in rapid motion. It is a great deal to have proved that no rail difficulty has been found from dust or dirt in the water, and that during the first winter of its trial the trough failed once only from freezing up, and then only in consequence of the water being allowed to stand in it without the disturbance due to a current running through it. Our readers will have observed that, encouraged by so much success, more than one engineer is now considering the practicability of extending the water-troughs, so as to give a continuous supply of water for any distance without a tender, and, if found desirable, as upon trial it might be, to condense not the whole of the steam, for a part is needed for draught, but all remaining below the back pressure line at each stroke.

The success of underground railways, both in a mechanicol and a pecuniary point of view, is more than many could foresee; and our own columns of former years even testify that we then found ourselves compelled to doubt at least the commercial success of such lines—a success which has proved so great that we are glad to acknowledge that we have been disappointed by it. The success of pneumatic post is already established, and we may now look, with some confidence, to the like success of the Waterloo and Whitehall Pneumatic Railway, the works of which, it is promised, will be finished in a year.

How many engineers a few—a very few—years ago believed in steam fire-engines? The late Mr. Braidwood, who, of all men, one would suppose, was the best qualified to judge, refused to countenance them until years after they had taken their place in the establisbed brigades of American cities. Captain Shaw has encouraged them, and the result is that they have been greatly improved, and now even surpass the best American steam fire-engines. They are now thought indispensable to the protection of London, as, indeed, of any city or town of sufficient size to maintain them.

Nine years ago the late Mr. John Fowler first exhibited his steam plow at the Royal Agricultural Society's show at Chester. For five or six years afterward it was doubted whether steam plows would "pay." Now they are made and worked by hundreds. It is a sad recollection that he who did so much to conquer this success should have been cut off so early from the enjoyment of his triumph. Steam locomotion on common roads, although a recognized practicability now, is still hanging fire; but it has gained much over the "practical" habit of unbelieving, whereby it was at one time "pooh-poohed" Let us hope that coal-cutting machines will gain even as much in commercial confidence. They must, we can't help thinking, yet take the place of those subterranean salves, the "putters and sinkers," and we hope the time is not further off than that when all town sewage will be returned to the land, instead of being cast into the sea.—*Engineer.*

## THE MAINTENANCE OF RAILWAY ROLLING STOCK.

At a meeting of the British Institution of Civil Engineers, held on the 16th May, a paper was read on the "Maintenance of Railway Rolling Stock," by Mr. Edward Fletcher.

This communication related to the rolling stock belonging to the Northeastern Railway Company, the statistics of which were comprised in twenty-nine tables, made up at annual periods extending over thirteen years, from 1852 to 1862 to 1864 inclusive, showing the total number of the different descriptions of stock, and the average age of every class at the end of each year. The rolling stock was embraced under four distinct heads, locomotive engines, carriages, merchandize, wagons, and chaldron coal wagons; the carriages and merchandize wagons being again subdivided into separate classes, of all of which a summary was given. The tables had been arranged with the view of showing, in a comprehensive form, the age of the different classes of stock and the average of the whole. And it was submitted that, if the average age of all the stock did not exceed one-half the number of years which might be found by experience to be a fair average of the existence, or life, of the stock, then that justice was done to the stock in maintenance. Another object of these tables had been to show what per centage the annual expenditure in maintenance bore to the first cost of the stock. It was believed that if these or similar tables were kept up with care, they would in a few years be the means of affording to the directors of any railway company good data for checking the annual expenditure, and for forming a correct opinion as to the sufficiency or insufficiency of the maintenance. The tables likewise showed the cost of maintenance of each vehicle per annum; and in the case of locomotive engines, the cost per mile run. With regard to the ultimate age or life of rolling stock, the author was of the opinion that the improved rolling stock of the present day, built of carefully selected and well-seasoned timber, and materials of the best quality—superior as it wrs in all respects to that built twenty years ago—might he fully calculated to have a life of from twenty-five to thirty years; assuming always that the stock was of such a character that it would not be necessary to break it up on any other ground than that of decay. It was also to be remarked that, on all large railways, the quantity of rolling stock was always increasing, the result of which was to keep down the average age of the stock; and having a large amount of new stock, on which there little expenditure for some years, the per centage of outlay was proportionately diminished. Making allowances on these points, the conclusion was arrived at that carriage stock might he fully maintained by an outlay of twelve per cent. on its cost, wagon stock hy an outlay of 6½ per cent., and locomotive stock by an outlay of 12½ per cent. The chaldron wagon stock, which was peculiar to the north of England, generally had cast iron wheels, was without springs, and was subject to great breakage by inclined planes and other hard usage; so that, whereas the general wagon stock only cost 6½ per cent. on its first cost for maintenance, the chaldron wagon stock cost 17½ per cent. This stock was hy degrees being replaced hy eight-ton wagons of superior construction. An eight-ton coal wagon would cost £90, and three chaldron wagons, to carry the same amount of coals, £75; but the cost of maintenance in the first case would be only £5 10*s*, whilst in the second it would amount to £13, showing that the superior wagon was the cheaper one of the two. The number of locomotive engines belonging to the company at the end of 1864 was 504, and their average age was 12 48 years. Assuming that the duration of life of an engine was twenty-five years, then the company should have been rebuilding at the rate of twenty engines annually, to be paid for out of revenue, in order to keep the stock up to its original value; but the table showed that for the last five years an average of only eleven engines had been rebuilt, including under this head only those which were entirely new, and of a different class when rebuilt. But taking into account the engines of the same class which had been so treated, the total number reconstructed had been twenty per annum. The principal part of the engines so altered during the thirteen years from 1852 to 1864, were those which were old when they came into the possession of the company.

Mississippi & Missouri Railroad.—At a recent meeting of the directors of this road, held in New York, arrangements were perfected to complete this road to Des Moines the present year. The distance from the present terminus of the road to Des Moines is about 52 miles. Twelve miles of this distance, to Grinnell, will be completed within a fortnight, and the forty miles will be put through during the summer, making a complete railway connection between Grinnell and the capital of Iowa. The balance of the route—about 150 miles in length—reaching to Omaha, will be constructed as soon as possible. This will complete the connection with the Pacific up the Platte Valley, and will open an interesting and most important portion of our Western territories to the inroads of Chicago trade and commerce.

John F. Tracy, Esq., the Superintendent, having resigned, A. Kimball, Esq., the Assistant Superintendent, has been elected Superintendent.—*Western Railroad Gazette.*

## THE ORIGINATOR OF CELLULAR IRON BRIDGES.

If any member of the engineering profession was asked for a record of "the works of Tom Paine, the engineer," the answer would be a vacant stare. If the inquiry was persevered in as legitimate and answerable, the querist would doubtless be looked upon as a lunatic The "Rights of Man" would most likely be referred to as an example of the bent of Tom Paine's mind, and the annals of engineering would be ransacked in vain for any record of his works. But nevertheless Tom Paine *was* an engineer; and amid all his political engagements and notwithstanding his vicissitudes, he found time to work out practically the principles of iron bridge construction. So far did he go as to arrest the attention of the leading men of science of his day, and to show to us that our systems of large span iron bridging are by no means so new nor so original as we are pleased to think them. Moreover, it can be pretty clearly proved that the bridge across the Wear at Sunderland, generally considered to have been designed by Mr. Burdon, was really made from Paine's model. The principle on which Mr. Paine commenced working was that a small segment of a large circle is preferable to a large segment of a small circle—just the idea upon which modern engineering has been working; making the intrados of the arch of as flat a curve as possible In 1786 Paine made in America models of his bridges in wood, cast iron, and cast and wrought iron combined. These models were wrought by his own hand, and Sherwin, in his life of Paine, observes that they exhibited an extraordinary degree not only of skill in mechanics but of taste. The largest was about 6 ft. in length, and was a design for a bridge over the Delaware, New Jersey, which he proposed to cross with one arch of 480 ft. span in the clear. Besides bridges he modeled a (then) novel description on wrought iron crane; he also turned his attention to the construction of ships of war and landing wharves of iron. In 1787 Paine went to Paris and presented his wrought and cast iron bridge model—which was for a single arch of 400 ft. span over the Schuylkill at Philadelphia—to the Academy of Sciences. The Academy appointed a committee to examine the bridge, and it was favorably reported upon In the same year he sent the model to the Royal Society, and shortly afterwards came himself to England. Here, in 1788, Paine took out a patent for his new method for constructing arches, vaulted roofs and ceilings. He takes his ideas from nature, referring to the spider's web as to the strongest mechanical method of construction. Another idea, also, is that of increasing the strength of matter by dividing and combining it in a cellular form, and so causing it to act over a larger space than it would occupy in a solid state. The quills of birds, the bones of animals, reeds, and such like, are his models in this respect.

With a view of testing his principle on a large scale, Paine, in the same year that he took out his patent, went to Rotherham, and at Messrs. Walkers' foundry he had a complete rib of 90 ft. span and 5 ft. versed since manufactured and erected. The contour of the arch was a regular curve of 205 ft. radius. The weight of iron in the rib was 3 tons, and when erected against two abutments it was loaded with twice the amount of its own weight. The success of the experiment led to the manufacture of a complete bridge at Rotherham, which consisted of five ribs of 110 ft. span and 5 ft. versed sine; the curve having a radius of 305 ft. This bridge was sent to London and erected in a field at Paddington, where, however, no abutments were provided, but it served to show the practicability of building a bridge on this principle. The bridge was brought to London packed away in the hold of a vessel, and after having stood a year at Paddington, it was taken down without any injury to any of its parts, and was ready for erection elsewhere. About this time Mr. Paine's attention was drawn from his bridge operations and he became engaged in political discussions with Edmund Burke, the result being the production of the 'Rights of Man." In 1792 Paine returned to France, and during his residence there the bridge over the Wear, at Sunderland, was constructed. In this bridge, which consists of a single arch of 240 ft. span, and 30 ft. rise, the radiating voussoirs of the stone arch are imitated by similarly formed perforated blocks of iron. This was the method adopted in Paine's experimental arch and in the model which had been left at the irom works where the Sunderland bridge was cast. This bridge was built chiefly at the expense of Mr. Milbanke and Mr. Burdon, the two members for the county of Durham, and to them Mr. Paine applied for compensation—or, in other words, for a royalty for the use of his patent. Mr. Milbanke admitted that the bridge was suggested by Mr. Paine's, but as to rewarding that gentleman's ingenuity Mr. Milbanke did not see that that was a matter of his, he only being a subscriber to the bridge. So he referred Mr. Paine to Mr. Burdon, but whether Paine's application in the new quarter met with success does not appear. It was doubtless only an early edition of the trite story of inventors and their rewards. All we know, and all we care now to record, is that, in a memoir on the subject of iron bridges presented to the Congress of the United States in 1803 by Thomas Paine, he offers to construct a bridge. He also requests that, if his offer be not accepted, at least the memoir may be put on the journals of Congress, as evidence hereafter that the new system of bridging originated in America.—*Mechanics' Magazine.*

## GRAND RAPIDS AND INDIANA RAILROAD.

We are informed, by Hon. T. D. Gilbert, that the work of completing that portion of the Grand Rapids and Indiana Railroad lying between Sturgis and Kalamazoo has been let to a new and perfectly responsible party, and that quite a large force of workmen have already been placed upon the line. This road must and will be built, sooner or later, and the sooner it is commenced in this locality the better it will be for the Valley City. There is no public enterprise, that when completed, would in our opinion so materially enhance the value of property and permanently secure the rapid and continual growth of this city, as the building of this road. We presume our people are moving, through a committee of good men appointed some time since, in this work, and ere long we shall have a favorable report of what has been and is being done.—*Grand Rapids Eagle.*

The following article contains an item of very great importance, as the point at which cannel coal is discovered, is on the line and in the midst of the company's land:

We have been shown by Mr. Ives of this city, some fine specimens of cannel coal just taken from a well near seventy-five feet deep, owned by Mr. H. M. Merrick, of Big Rapids. About two years since a bed of this kind of coal was found some twenty eight feet below the surface in another locality in that town, and specimens of it were forwarded to the gas works at Philadelphia, where its qualities were tested and the article pronounced the best of canel coal Mr. Ives is of the opinion that there is an inexaustable supply of that coal in that locality, and that it can be reached and obtained at a limited expense. Should this discovery meet the expectations of those particularly interested in it, it will sooner or later be a source of wealth, not only to the owners of the soil in which the coal is embedded, but to the whole State; thus making a new inducement for the speedy construction of the Grand Rapids and Indiana Railroad.—*Gaand Rapids Eagle.*

An informal meeting was held at the office of J. A. Walters, Esq, in this village, on the evening of the third inst., at which Gen. Curtenius was chairman, and C. F. Miller, secretary. After a full and free discussion of the subject it was resolved that the township of Kalamazoo would do her part toward raising local aid to secure the construction of the division of the road between this and the city of Grand Rapids; and a committee of citizens was appointed to visit Grand Rapids for the purpose of agreeing on a plan by which the two places may make a united effort to secure the construction of this part of the road.

The division extending southward to the Airline R. R. is assuming a favorable position. We are informed that the citizens of La Grange and Wolcottville have notified the President of the company, that each has made up the amount required of it—one $40,000, and the other $15,000—which is now ready to be delivered in good individual bonds.—*Kalamazoo Gazette.*

## THE FUTURE FREIGHT OF WESTERN RAILROADS.

The progress of time has made a silent change in the productions of sections of the country, which is becoming manifest in railroad freights. During the revolutionary war the counties of Warren, Somerset, and Hunterdon, in New Jersey, were the granary of the country and sustained the army of Washington in its darkest hours. Subsequently, in Central and Western New York, the raising of grain became the staple of production. Genesee wheat and flour were the coveted brands of the dealer and consumer. The city of Rochester, with its sixty thousand inhabitants, aside from its water power, has been built up and sustained by the rich country around it. Utica, Syracuse, Auburn, Lockport, and Elmira have grown up from nearly similar causes. Throughout all this region are scattered numerous large and growing villages, abounding in the necessaries of life. The development of the immense grain resources of this region was produced by the opening of the canals and railroads. The same cause has led to the settlement of the Western States, and shown that no section can compete with them in the production of grain staples. Western New York is unable to maintain a competition, and is leaving the market in their hands. The dairy business, the culture of fruit—of which the nurseries of Rochester are said to be the largest in the world, yielding an annual income exceeding $3,000,000—and the grape culture have been assumed instead.

But the growth of the grain-growing regions,

of the West has outstripped the rapidity of Western New York. Their trade now exceeds the capacity of the Eastern canals and rail roads In ordinary seasons, for a few years past, the New York canals have been blocked up with boats loaded with Western products, whilst the two main railroads have been more than taxed to their utmost capacity to meet the demands made upon them. During last winter, a hundred thousand barrels of flour, and a very large amount of other Western produce, were detained in Detroit, awaiting transhipment, on account of the inability of the New York railroads to carry them. At the same time there were more than twelve hundred loaded freight cars on the Great Western Railroad, waiting at various stations between Windsor and Suspension Bridge, from a similar cause. The shippers at Chicago were compelled last spring to send their freight by Cairo and New Orleans to New York, finding that long and tedious route even cheaper and quicker than by the New York railroads.

If such has been the growing burden of railroad freight from the West, what does the future indicate? In estimating an increase in the future, it is safe to base calculations on the results of the past and the condition of the present.

A comparison of the Eastern and Middle with the Western States shows the following results:

ACRES OF IMPROVED LAND.

| STATES. | 1850. | 1860. |
|---|---|---|
| Maine | 2,039.593 | 2,677.216 |
| Massachusetts | 2,133,436 | 2,155,512 |
| New Hampshire | 2,251,488 | 2,367,039 |
| Verment | 2 601,409 | 2,758,443 |
| Rhode Island | 356.487 | 329,884 |
| Connecticut | 1,768,178 | 1,830,808 |
| New York | 12,408,964 | 14,376,397 |
| Pennsylvania | 8,623,619 | 10,463,306 |
| | 32,153,174 | 37,958,605 |
| Ohio | 9,851,493 | 12,665,587 |
| Indiana | 5,046,543 | 8,161.717 |
| Illinois | 5 039,545 | 13,251,473 |
| Michigan | 1,929,110 | 3,419,861 |
| Wisconsin | 1,045,499 | 3,746,036 |
| Iowa | 824,682 | 3,780,293 |
| Minnesota | 5,035 | 554,397 |
| | 23,741,907 | 45,579,324 |

VALUE OF LIVE STOCK.

| | 1850. | 1860. |
|---|---|---|
| N. England N. Y. and Pa. | $134,909,244 | $241,866,442 |
| 7 Western States.. | 107,498,407 | 270,454,908 |

BUSHELS OF WHEAT PRODUCED.

| | 1850. | 1860: |
|---|---|---|
| N. England, N. Y. and Pa. | 14,227,759 | 22,803,610 |
| 7 Western States.. | 40,860,386 | 86,666,107 |

BUSHELS OF INDIAN CORN.

| | 1850. | 1860. |
|---|---|---|
| N. England, N. Y. and Pa. | 47,879,470 | 57,366,498 |
| 7 Western States.. | 185,993,965 | 319,337,474 |

POPULATION.

| | 1850. | 1860. |
|---|---|---|
| N. England, N. Y. and Pa. | 8,137,296 | 9,922,133 |
| 7 Western States. | 4,721,551 | 7,773,920 |

If these figures are made a basis for estimates of the next twenty years, the results would be about as follows, besides a corresponding increase in almost every other article of agriculture:

| | N. ENG., N. Y. AND PA | 7 WESTERN STATES. |
|---|---|---|
| Population | 13,000,000 | 14,000,000 |
| Lands cultivated, acres | 50,000,000 | 150,000,000 |
| Live stock | | $1,162,000,000 |
| Wheat, bushels | | 350,000,000 |
| Indian corn, bush.. | | 1,200,000,000 |

It is true that the Southern outlet has been comparatively closed; still, it is evident that the tax on the railroads to move the Western grain to the Eastern market is destined to grow heavier every year, even after allowing a heavy drawback upon agriculture by the effects of the war.—*Stockholder.*

## LIABILITIES AND RESOURCES OF CANADA.

CONDENSED BALANCE SHEET OF THE PROVINCE OF CANADA, DEC. 31, 1864.

LIABILITIES.

| | | |
|---|---|---|
| Fun. debt. direct. | $60 959,101 13 | |
| " indirect | 874,296 64 | $61,824,367 77 |
| Indebtedness to trust funds: | | |
| School funds | 1,956,813 87 | |
| Indian funds | 1,614,019 10 | |
| Miscellaneous funds | 569,650 59 | 4,150,983 46 |
| Miscellaneous Accounts | | 7.5, 39 19 |
| Bank Accounts | | 3.350,50. 26 |
| Liabil. in connection with Seigniorial tenure | | 4 118.202 62 |
| Consolidated fund | | 2,043, 61 40 |
| | | $76,223,061 65 |

RESOURCES.

| | | |
|---|---|---|
| Sinking funds | | $1,536,792 15 |
| Provincial wor s, viz: | | |
| (a.) St Lawrence Cana's | $7,406,369 86 | |
| (b.) Welland Canal | 7,309,849 16 | |
| (c.) Chambly Canal and River Richelieu Improvements | 433,807 23 | |
| (d.) Burlington Bay C nal | 308,328 32 | |
| (e.) Lake St Peter improvements | 1,098.235 08 | |
| (f.) Ottawa Works | 1,148,690 16 | |
| Improvements of the Trent | 558,506 20 | |
| (g.) Harbors and Lighthouses | 2,549.617 42 | |
| Roads and bridges | 1,726,695 34 | |
| Gov't buildings at Ottawa | 1,812 508 71 | |
| (h.) Loans to Incorporated Companies | 142,154 12 | |
| Miscellaneous Works and Bridges | 1,860 862 13 | 47,355 544 73 |
| (i.) Due by building and harbor funds | | 874,296 64 |
| Railway de entu e accounts: | | |
| (j.) C. T. Railway, including subsidiary lines | 15 312,894 17 | |
| (k.) Great Western Railway | 2,810,500 00 | |
| (l.) N rthern Railway | 2,311 066 67 | 50 435,060 84 |
| Railway interest and special accounts | | 2,042 035 15 |
| Municipal loan fund account, (m.) | | 12,890,837 95 |
| Miscellaneous accounts | | 1,904 439 01 |
| Due by trust funds | | 779,4 9 84 |
| C nsolida ed fund investment account | | 689.635 69 |
| Bank of Upper Canada, special occeun.t. | | 1,250.000 .0 |
| Bank acc unt, including Crown lands, ($90,936 64) | | 706,039 64 |
| | | $76,223,061 65 |

(*a.*) The St. Lawrence and Welland Canals together 54 miles long, with 54 locks and a lockage of 535 feet, enable vessels to pass from the upper lakes to the ocean.

The St. Lawrence Canal locks, 24 in number, besides guardlocks, are 8 feet deep, 45 broad, and 200 long, and can pass vessels 142 feet long, 44¾ broad, and 9 deep.

(*b.*) The Welland Canal locks are 10 feet deep, 26½ broad, and 150 long, and can pass vessels 142 feet long, 26 broad and 10 deep.

(*c.*) The Chambly Canal enables vessels to pass from the St. Lawrence into Lake Champlain, It has nine locks, (besides the St. Curs,) 7 feet deep, 24 broad and 122 long.

(*d.*) The Burlington Bay Canal, or cut, opens up Burlington Bay to the trade of Lake Ontario.

(*e.*) The improvements at St. Peter Lake will soon enable sea going vessels to go up to Montreal, drawing 20 feet of water. They have been effected by dredging.

(*f.*) The "Ottawa Works" are timber slides and dams, enabling the lumber of the Ottawa country to be floated down to tide water, without injury from falls or rapids.

(*g.*) The light-houses and harbors include those on the lakes as well as on the salt water.

(*h.*) The principal loan was to the De-jardin's Canal Company. This canal connects the town of Dundas with Burlington Bay.

(*i.*) $481,426 67 of this is due by Montreal harbor.

(*j.*) The Grand Trunk Railroad Company now controls 1,377 miles of railway, in addition to the 54 miles of the Ottawa and Prescott Railroad. which it works for the Ottawa and Prescott Railroad Co.

(*k.*) The Great Western Railway and its branches are 345 miles in length.

(*l.*) The Northern Railway is 94 miles long.

(*m.*) The advances made to various municipalities under the municipal loan fund account, secured the construction of various important works, such as the Ottawa and Prescott Railway; the Brockville and Ottawa Railway, 81 miles; the London and Port Stanley Railway, 24 miles; also, water works and other valuable local improvements.—*Banker's Magazine.*

The Marietta and Cincinnati Railroad Company make the following report of their earnings for the past six months:—

| | |
|---|---|
| Receipts from Jan. 1 to July 1. 1865. | $544,456 |
| Same time in 1854 | 465,769 |
| Increase | $78,687 |

—The Illinois Central Railroad Company make the following report for the month of June:—

LAND DEPARTMENT.

| | | |
|---|---|---|
| Acres construction lands sold | 7,219 42 for | $79,923 75 |
| Acres interest fund lands sold | 147 80 for | 2,481 88 |
| Acres free lands sold. | 1,342 77 for | 15,915 24 |
| Total sales during the month of June 1865. | 8,709 99 for | $98,320 87 |
| To which add town lots sales | | 1,480 00 |
| Total of all | | $99,800 87 |
| Cash collected in June | | $133,983 71 |

TRAFFIC DEPARTMENT.

| | |
|---|---|
| Receipts from passengers | $219,856 86 |
| Receipts from freight | 349,845 80 |
| Receipts from mails | 6,358 33 |
| Receipts from rent of road | 4,000 00 |
| Receipts from other sources | 10,000 00 |
| Total receipts in month June '65 | $590,060 99 |
| Total receipts in month June '64 | 510,099 74 |

—Statement of approximate earnings of the Marietta and Cincinnati Railroad Company for the first week of July, 1865:

| | 1865. | 1865. |
|---|---|---|
| Passengers | $13,828 82 | $7,478 53 |
| Freight | 8,297 53 | 11,747 60 |
| Mail, exp. & telegraph | 1,100 00 | 1,189 58 |
| Total | $23,226 35 | $20,415 71 |
| Total for the fiscal year, commencing Jan. 1 | 567,082 51 | 484,185 09 |

# COUPON AND LOCAL TICKET !

CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to exccute, with despatch, all orders for

CONSECUTIVELY NUMBERED

## COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD.


## GOVERNMENT TRANSPORTATION.

GENERAL ORDERS No. 17.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., March 16, 1865.

1st. For the purpose of producing uniformity in the Transportation service and guarding against abuses, blank books of Transportation Orders will hereafter be issued from this office to the Chief Quartermaster of each Department, to be by him immediately furnished to each officer under his order entitled to issue the same; after the receip of which no other form will be used, unless in emergencies when the prescribed blank form cannot be had, and then the reason for not using it must be stated in the order.

These blank orders will be numbered and registered in this office in such manner that there will never be two orders of the same number in circulation; they will be charged to the Chief Quartermaster to whom sent, who will in like manner charge and hold responsible his subordinate officers.

On exchange of posts, or on transfer to another officer, like receipts must be taken and forwarded to the Chief Quartermaster of each Department.

2d Within five days after the end of each month, a concise report will be made to the Department Quartermaster of the number of orders issued, the number cancelled by error (which must accompany the report), and the number remaining on hand, with a statement of the amount of transportation furnished in the month; which report in a condensed form (accompanied by the orders so cancelled) will be by him immediately transmitted to the Quartermaster-General, under envelope, endorsed on margin "Rail and River Transportation."

3d. The marginal register should contain the substance of the order issued and will be preserved by the officer issuing for his own protection, or return to the Department Quartermaster or this office, as may be hereafter required.

*Care should be taken at all times to keep on hand a sufficient supply of these blank orders*, which can be obtained upon application to the proper Senior or Department Quartermaster.

4th. Unless in extraordinary circumstances, all rail and river transportation, passenger and freight, at any post, will hereafter be under the control and management of a single officer, on whom requisitions will be made by other officers requiring transportation.

5th. When more than five persons, in one party, are to be transported over one road, or a continuous line of roads, separate orders for transportation must be issued for each road to be passed over. These orders should be received on the train instead of tickets, and are to be receipted by the party named in the order, and given up on the cars—the officers, or persons in charge, filling the receipt with the number actually carried. Five persons, or a less number, may be carried over a contiouous line of roads upon a single order for transportation, and this order may be exchanged at the starting-point for tickets over the entire route.

6th. Settlement should not be made nor vouchers given to railroads on orders for passenger transportation properly belonging to other roads, but the *passenger* accounts for each road should be made up separately in the name of the roads to which they belong.

7th. Appletons' Railway Guide for January, 1865, will be used as a standard for indicating routes and fixing distances, unless the actual distance is proved to be less, in which case settlement will be made on the basis of actual distance. Where this Guide cannot be more readily procured it can be furnished from this office.

8th. When a number of troops are to be transported from any point to any other point, on the same day or train, it should be done in squads as far as practicable. A single transportation order, or set of orders, should be given to the ranking officer, or most responsible person of the several detachments.

9th. Blank books of Free Transportation Orders will also be furnished, to be used on boats belonging to, or in the service of, the Quartermaster's Department, or on railroads operated by the Government. The free passes in these books will be given to persons entitled to receive Government transportation, and should not be issued without designating on the order the boat or road on or over which the person is to be transported. The marginal registers in these books will also be preserved for return to the Department Quartermaster, or to this office, as may from time to time be required.

Should the route to be traveled be in part over roads or on those owned by private parties or companies, care should be taken that Free and Pay Orders are given as the case may require, or such requisitions furnished as will enable the party entitled to transportation to procure it at points where pay transportation commences

10th. To warrant the granting of transportation, except in cases specified by Regulations or General Orders, published for general information, the person demanding the same should show a requisition or order from competent authority requiring the movement by public conveyance in the performance of public duty.

The original requisition, when not necessarily required by the officer presenting it should be retained by the officer furnishing the transportation; in other cases, a certified copy or necessary extract from the order should be furnished to, and preserved by, the officer granting transportation as his proper authority therefor, and a certified copy of the same must be endorsed on the back of the order.

11th. When the cost of transportation is to be reimbursed to the Government, as in the case of sick and furloughed soldiers, the required certificate should not only be made upon the furlough or order, but the transportation order should also be endorsed on the back substantially as follow: "The within transportation, furnished under General Order ——, and the proper officers duly notified. —— ——
A. Q. M."

12th. When transportation is granted to persons not in the military service, full explanations therefor should be given

13th. Orders for transportation should give the name of the party to be transported, or if there are several, then of the officer or person in charge, and state the number of men to be transported.

Orders for "one man," "ten men" and the like, without designating any name, are improper

14th. The receipts for transportation should be filled up in ink by the officer or person named in the order before signing, and if he cannot write his name, there should be a witness to his mark.

Names and places should be written distinctly in full, and not abbreviated.

15th. Duplicates of orders for passenger transportation should not be issued.

16th. When a requisition calls for transportation to any given point and return, the order should be issued to the place of destination, and the return transportation should be obtained at that point, provided it can there be procured.

17th. Upon the form of order now issued should be presented all the facts necessary to enable an auditing officer to decide as to the regularity or propriety of the order, so that it may be paid by any authorized disbursing officer.

18th Erasures, interlineations or alterations, if made against the interest of the Government, should be explained on the order by the issuing or other competent officer; otherwise, the transportation should only be settled for in accordance with the order before change or modification.

19th Transportation by water being generally the cheapest should be selected when consistent with the interests of the service All transportation should be furnished by the shortest practicable route, unless a different route is indicated in the order which directs the movement. Where there are two or more competing routes without material difference in distance or time, the business should be divided in equitable proportion between them, the distance for which compensation is made being estimated by the shortest practicable route.

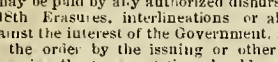
20th. In no case is subsistence furnished by the Quartermaster's Department.

21st. The good of the service requiring that railroads should obey the requisitions of officers properly authorized to demand transportation, in case compensation is made by the Government for illegal or unauthorized transportation so required, the officer making the requisition or issuing the order will be charged therewith, or if not paid by the Government, the railroad will be entitled to recourse upon such officer

By order of the Quartermaster-General.

LEWIS B. PARSONS
*Colonel, and Chief of Rail and River Transportation.*


## The Old And Reliable Route.



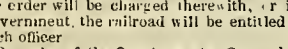
**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all eastern points, with the greatest promptitude and dispatch

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.
J. J. HOUSTON, General Freight Agent.
my11 Pittsburg, Pa.

## MONDAY MORNING, MAY 8,
THE
## Atlantic & Great Western Railway



WILL COMMENCE RUNNING ONE THROUGH TRAIN between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at 8:00 A. M; arrive 8:10 P M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

## *STEAMSHIP COMPANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | | |
|---|---|---|
| WASHINGTON | 3,704 tuns, | 900 horse-power. |
| LAFAYETTE | 3,204 tuns, | 900 horse-power. |
| EUROPE | 3,254 tuns, | 900 horse power. |
| FRANCE | (afloat). | 900 horse power. |
| NAPOLEON III | (afloat), | 11,000 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine) ..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its equivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

## NATIONAL STEAM NAVIGATION COMPANY. (LIMITED,)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building) | 3,112 | —— |
| ENGLAND (now building) | 3,430 | —— |
| SCOTLAND (now building) | 3,430 | —— |
| ERIN | 3,310 | Grace. |
| HELVETIA | 3,315 | Prowse. |
| PENNSYLVANIA | 2,872 | Grogan. |
| VIRGINIA | 2,872 | Lewis. |
| LOUISIANA | 2,165 | Aspiett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL ..... $100.
STEERAGE PASSAGE TO LIVERPOOL .... $35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to
WILLIAMS & GUION, No. 71 Wall street.
For steerage passage apply to
640*. WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor).— The well known steamers of the Liverpool, New York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN | $90 00 | STEERAGE | $30 00 |
| First Cabin to London | 95 00 | Steerage to London | 31 00 |
| First Cabin to Paris | 105 00 | Steerage to Paris | 40 00 |
| First Cabin to Hamburg | 100 0 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30 Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G DALE, Agent,
640* No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAM SHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR ..... 2,595 67-95 tuns.
WILLIAM R, BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m, from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage ..... $150
Second Cabin Passage ..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge

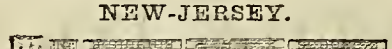
The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Havre, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
640* JAMES A. RAYNOR, No. 10 Barclay street.

## CENTRAL RAILROAD
—OF—
## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6:0 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:0 a m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:0 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg etc.

4 p m.—For Easton, Scranton Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:30 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m.; 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.00; 8:00 (Ex); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p. m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex); 3:00 (Ex.) 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); 11 a. m (Ex); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex); 12:15 p. m to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex) a. m.; 1:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12: 5 p. m. to Northampton.

For Housatonic Railroad, 8:00 a. m, and 3:00 p. m.

For Naugatuck Railroad, 8.00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7.00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

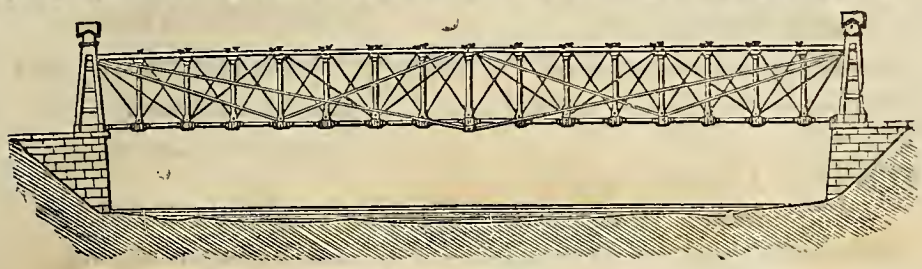
JAMES H. HOYT, Superintendent.

## NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '63. 1y. Letter Box, 1322. C. J. SCHULTZ, Pittsburgh, Pa

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets etc. Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or not the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y 1

---

## KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS.

PHILADELPHIA.

---

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

## FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL.

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or Without Axles.

WHEELS FITTED

To Hammered or Rolled Axles,

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

MACHINE SHOP

SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

RAILWAY SPRINGS.

FREIGHT

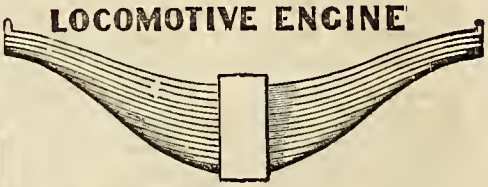




PASSENGER



LOCOMOTIVE ENGINE



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

ELLIPTIC AND SEMI-ELLIPTIC

SPRINGS.

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledge himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

PHILP S JUSTICE,

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

No. 47 West Front St., CINCINNATI

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

## STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg. Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash Ington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more ot the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHING. TON CITY

W P. SMITH, *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent. Baltimore.*

## ittle Miam. and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express..... ..... | 6 00 A. M. | 7 30 P. M. |
| Mail and Express ..... | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation..... | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation..... | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express ... ..... | 10 30 P. M. | 10 05 A. M. |

☞Sle ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday nigbt, in plsce of Saturday nigbt.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail..... | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo..... | 7 00 A. M. | 9 45 P. M |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation..... .... | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville..... | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation..... | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Ibnsee call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail..... .....6:50 A. M | | 1:00 A. M. |
| St. Louis and Cairo Accommodation.....4:00 P. M. | | 12:00 noon |
| Louisville, St. Louis and Cairo Express. ..... . 8:00 P M. | | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P M.
Two trains Sunday, leaving at..... 4:00 P. M & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening traio at 8 o'clock connects for Louisville via Mitchell and New A bany.

☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnsti me.

For all information and Through Tickets, please apply at the Ticket Office, No. 89 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
General Ticke Agent.

W I. GRISWOLD nera' Snp't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago n advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can he obtaine at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnsti Agent.

## MOSELEY'S

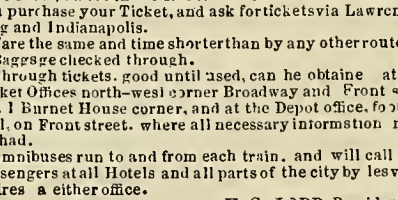
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



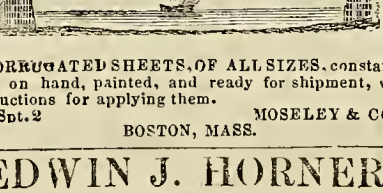
CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2 MOSELEY & CO.
BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—½ to 24 inches in diameter, and branches for same. &c.,

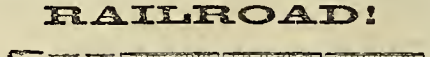
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!



## FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M night.

On Sundays, 4 30 A M; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East a Wes

WM. EARNS Supt

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, JULY 20, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| *Atlantic & Great Western—* | | |
| | 9:00 A. M. | 7:30 P. M |
| | 10:30 P. M. | 7:30 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond, Chicago and Indianapolis | 7:00 A. M. | 9:45 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:50 P. M. |
| Richmond and Chicago | 7:00 P. M. | 11:35 A. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | 7:00 A. M. | 8:05 A. M. |
| Dayton Accommodation | 2:30 P. M. | 9:45 P. M. |
| Eastern Night Express | 10:40 P. M. | 7:55 A. M |
| *Indianapolis & Cincinnati—* | | |
| Chicago and St. Louis Express | 7:00 A. M. | 12:00 P. M. |
| Springfield and St. Joe Express. | 1:00 P. M. | 5:00 P. M. |
| St. Louis and Chicago Express | 4:00 P. M. | 2:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 4:50 P. M. | 8:35 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:40 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 7:00 A. M. | 9:45 P. M. |
| Connersville, Cambridge City & Indianapolis Express | 3.30 P. M. | 12:50 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis. Cairo and Louisville | 7:20 A. M. | 8:00 A M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P, M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 7:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 8.00 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 6:00 A. M. |
| Evening Express | 2:35 P. M. | 10:12 P. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton. Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapoli & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## CIN. HAM. & DAYTON AND DAYTON & MICHIGAN R. R. CO.

We have noticed the annual reports of this company from time to time as they were made; but we think it would be interesting to trace the history of its progress, showing its present condition. The report of May, 1865, is the *eighteenth* of the Cincinnati, Hamilton and Dayton; and the *fifth* of the Dayton and Michigan roads. Substantially, these roads are now united; so that the line from Cincinnati to Toledo is one in interest and in working. Both are under the presidency of Mr. L'Hommedieu, and the superintendence of Mr. McLaren, who have so ably and acceptably presided over the former road for many years.

The "first annual report" of the directors of the Cincinnati, Hamilton and Dayton Railroad was made in 1850. Only two of the gentlemen, then connected with the road, are now its officers. These are Messrs. L'Hommedieu and Shoemaker, the latter being then engineer. The report states that the contracts for much of the work had been made in the previous December, 1849, and it was hoped to complete the road next year, 1851.

The "second annual report" states that in September previous, 1851, "the first train of cars left Cincinnati for Dayton, and on the 3d of the same month the road was regularly opened for travel, two daily trains being placed upon it." In this report mention is made that "the Dayton and Michigan, from Dayton to Toledo, will also be an important connection; and that the work was under contract to Troy." In this report it is stated that the gross earnings of the first *six months* of

| | |
|---|---|
| 1851 were | $97,214 51 |
| Expense for the same period | 35,181 95 |
| Net earnings | $61,032 56. |

In the 3d annual report, May, 1853, it is said that the gross earnings for the year ending April, 1853, were

| | |
|---|---|
| | $321,793 17 |
| Running expenses | 120,826 91 |
| Net earniugs | $200,966 26 |
| Total cost up to that time | $2,407,016 64 |

The "tenth annual report" was made in May, 1856, and gives the following facts in relation to the business and cost of the road, viz:

| | |
|---|---|
| Gross receipts | $508,271 71 |
| Transportation expenses | 230,258 84 |
| Net receipts | $278,012 87 |

Deducting interest and floating debt, $156,079 12 was applicable as dividends, or profits on stock. It was about 6 per cent. on the actual stock. This report shows that at five years from its completiou this road became a paying road, its stock being intrinsically worth new par. The actual cost of the road was then $3,216,191; the cost having been increased in three years $806,000, and the profits $178,000. Had these been set off by themselves, they show that the *increased outlay* of capital had paid more than 20 per cent. profit. This is a most instructive lesson to railroad constructors. It proves, what in more than nine cases out of ten will be true, that in making a railroad the *last dollar* necessary to it completion is *more profitable than any other.* A railroad is, in fact, like many other machines, not worth much till it is *completed.*

We have referred to these early reports to show the progress of the road, and to trace a history, which is substantially a history of many roads in their often difficult and almost impracticable attempts to become a perfectly successful organization. We shall now show the present condition of this and the Michigan road.

The last report is the eighteenth and shows the current account of receipts and expenses to be as follows, viz:

| | |
|---|---|
| Gross earnings | $1,241,856 71 |
| Gross expenses | 789,870 99 |
| Net earnings | $551,985 72 |

By comparing this with the receipts and expenses of 1856, we find that the gross receipts are $733,585 *greater* and the gross expenses $559,612 *greater;* so that there is a *gain* of $173,973 in the net profits. On referriug to the account of *cost*, we find that the present cost (independent of the *six foot track*) $3,824,000; an increase of $608,000 since 1856.

In addition to this expenditure, the company has expended a million and a half of dollars in making a six foot gauge for the use of the Atlantic and Great Western road, which completes a *six foot gauge road from the city of New York to the city of St. Louis.* This is an important and interesting fact in the history of American roads. The capital for this additional outlay has been derived from the sale of its stock and bonds, including a portion of the bonds of the Dayton and Michigan road.

The statement of capital and bonds in 1865 is as follows:

| | |
|---|---|
| Capital stock | $3,000,000 |
| Mortgage debt | 1,629,000 |

In the current year the cash dividends have been 9 per cent., which, estimating money as worth 7 per cent., (and in general business it is worth no more,) makes the stock intrinsically worth 128. The dividends in a series of years will average this, and whatever it may sell for in market the stock will always be worth more than par.

The following tables are interesting:

1. The gross earnings of the road for thirteen years ending March 31st, 1865, have been as follows, to wit:

| | |
|---|---|
| 1853 | $321,793 17 |
| 1854 | 463,021 42 |
| 1855 | 483,629 48 |
| 1856 | 471,885 70 |

| | |
|---|---|
| 1857 | 518,333 95 |
| 1858 | 487,421 27 |
| 1859 | 489,437 92 |
| 1860 | 561,681 52 |
| 1861 | 615,071 07 |
| 1862 | 646,205 67 |
| 1863 | 877,403 86 |
| 1864 | 1,083,328 47 |
| 1865 | 1,241,856 71 |

2. Comparative statement of the principal articles of freight transported for the past two years:

| Articles. | 1864. | 1865. |
|---|---|---|
| Flour | 281,891 bbls. | 268,322 bbls. |
| Alcohol and whisky | 112,684 " | 66,902 " |
| Beef, pork and lard | 64,292 " | 80,627 " |
| Cattle and horses | 12,701 No. | 10,392 No. |
| Hogs | 198,597 " | 86,550 " |
| Flax seed | 120,646 bu. | 76,458 bu. |
| Rye wheat, oats, corn, barley and malt | 2,028,699 bu. | 2,448,770 bu. |
| Apples and potatoes | 213,671 bbls. | 279,691 bbls. |
| Lime | 114,969 bu. | 435,711 bu. |
| Coal and coke | 375,392 " | 482,217 " |
| Box and bulk meat | 15,842,424 lbs. | 2,442,356 lbs. |
| Lumber | 7,706,292 feet. | 24,881,931 feet. |
| Merchandise | 2,105,516 pkgs. | 1,949,888 pkgs |

3. The numbar of passengers carried over the road is 542,000, which, like all other branches of its business, has greatly increased in the last four years. The taxes to the General Government and State amount to $58,-356, which shows that the Government is now deriving a very large increase from railroads.

Of the Dayton and Michigan road we have only this report and will give the results as they are here presented:

| | |
|---|---|
| Gross earnings | $1,066,217 89 |
| Gross expenses | 637,266 73 |
| Net receipts | $429,011 16 |
| Cost of the road | $5,733,800 98 |

The net reccipts make more than 7 per cent. of the total cost. This cost exists in following form:

| | |
|---|---|
| Capital stock | $2,365,000 |
| Bonded debt | 3,785,000 |

It appears from the data that taking the whole line into view from Cincinnati to Toledo (and it ought to be taken altogether) the results in round numbers are as follows:

| | |
|---|---|
| Total length | 267 miles |
| Total cost | $10,000,000 |
| Cost per mile | 37,450 |
| Gross receipts | 2,308,074 60 |
| Gross expenses | 1,427,077 72 |
| Net receipts | 880,996 88 |
| Net receipts per mile | $3,300 |
| Net profit per cent | 8 per cent. |

This shows that if the whole line from Cincinnati to Toledo be taken together as a whole, it is already a profitahle stock. The committee of the stockholders express an opinion that there may be a falling off in business, in consequence of a change from war to peace. Wc douht this. Unless there be some special reason in the case of this road, we donht whether there will be any diminution from this cause. The general husiness of the country will be increased and trade very active. Besides, this is the only *direct* line from Cincinnati to the northern lakes; and as Toledo, Detroit and the Lake Basin increases in population and traffic, the basiness of this road will increase also.

This review shows that the line for Cincinnati to Toledo may hereafter take its place as one of the *permanently profitable railroads of the country.*

## COTTON GINS.

In all probability, the culturc of cotton in the United States will he renewed with increased vigor. The invention of the cotton gin, was, in reality, the commencement of the growth of cotton in the United States on a large scale. We give helow the history of the cotton gin, taken from the United States census report on agriculture. It will he interesting to somc of our readers:

"Although cotton gins are made hy a few establishments in the Northern States, their manufacture is principally a Southern one, and amounted in 1860 to the value of $1,077,-315, which was the product of fifty-five estahlishments, all but three of them southern. Alabama is the largest manufacturer of machincry for cleaning cotton, having sixteen factories, employing 178 hands, and producing gins to the value of $434,805. Georgia ranks next, having twelve estahlishments, whose product exceeded a quarter of a million. The manufactories of cotton gins in Mississippi are relatively the largest, three factories employing seventy hands, and returning an aggregate product of $131,900. In Texas, where the first cotton gin was erected ahout 1823, there are four manufactories of gins. Many of these machines are made in our northern machine shops, along with other cotton machinery, from which they are inseparable in the general estimate of value.

The history of the cotton gin furnishes one of the most remarkahle examples on record of the power of a single lahor-saving machine to influence the social and industrial interests, not merely of a single nation, hut in a great measure of the civilized world. The simple mechanism of the saw gin invented hy Whitney enahled one farm hand to separate the seed from 300 pounds of cotton fihre in a day, instead of one pound, as he had heen able to do hy hand. Its introductien at the particular period when the completion of the hrilliant series of inventions for carding, spinning, and weaving cotton had created a demand for the raw material, at once directed into a new and profitahle channel the agriculture of the Sonth, and at the samc time furnished the manufacturing industry of Europe and America with one of the most valuahle staples, and the shipping and commercial interests of the world with an enormous trade in its raw and manufactured products. The increase in the growth and exportation of raw cotton which followed has no parallel in thc annals of industry, save in the wonderful dcvelopment of its manufacture in England and the United States. Thc effects of this growth of the hushandry and manufacture of cotton in increasing national wealth, in furnishing employment to labor and capital, and in increasing the comfort of all classcs, can scarcely be conceived in all its magnitude.

In 1792, the year preceding the introduction of the saw gin, the amount of cotton exported from the United States was only 138,328 pounds, and the total domestic consnmption was ahout five and a half millions of pounds. During the next year there were exported nearly half a million pounds; in 1794, 1,6C1,-700 pounds; in 1795, 5,276,300 pounds; and in 1800, 17,789,803 pounds.* In 1860 the production of ginned cotton in the Southern States amounted to 5,198,077 hales of 400 pounds each, or 2,079,230,800 pounds, which was more than seven-eights of the total production of cotton throughout the world. The quantity exportcd in that year was 1,765,115,735 pounds, equivalent to 4,412,789 hales of 400 pounds each. To prepare this large amount of cotton for market hy the primitive methods would have heen utterly impracticahle. Not only is the lahor of the planter facilitated and cheapened hy the use of the machine, hut the cotton is much hetter cleaned than by the old methods, which left it unsnitahle for the finer fahrics.

Although the earliest mode of separating cotton from the seed, and the one chiefly practiced in the cotton States previous to the invention of the saw gin, was to separate the seed with the fingers; yet mechanical contrivances for that purpose have heen long in use, having heen chiefly horrowed from India, the cradle of the cotton cnlture and manufacture. In that country the practice of heating out the seed was long in usé. A more effectual modification of the same method, employed for centuries in eastern countries, and very early introduced into Georgia, which took the lead in cotton hushandry, was the how string operation. It consisted in the employment of a long bow fitted with a multitude of strings, which heing vihrated by the hlows of a wooden mallet while in contact with a bunch of cotton, shook the seed and dust from the mass. Hence upland or short staple cotton hecame known in commerce as "howed cotton." A form of the roller gin appears also to have been used in India in early times, as mentioned hy Nearchus, and consisted of two rollers of teakwood fluted longitudinally, and revolving nearly in contact. In 1728 we find mention of "little machines, which being played hy the motion of the wheel, the cotton falls on one side, and the seed on the other, and thus they are separated."

About the year 1743, M. Duhreuil, a wealthy planter of New Orleans, invented a cotton gin which was so far successful as to give quite an impulse to the cotton culture in Louisiana, but nearly forty years later the colonial authorities in Paris recommended the importation of machinery from India for cleaning the seed.

Early in the revolution, Kinzey Borden, of St. Paul's Parish, South Carolina, constructed

* Woodbury's Treasury Report, 1835—'36.

a roller gin, believed to have been the first ever used in that State for cleaning the long staple and silky cotton, of which he was one of the first cultivators. It consisted of pieces of burnished iron gun barrels secured by screws to wooden rollers turned by wooden cranks, like a steel corn mill. A Mr. Bisset, of Georgia, in 1788, contrived a gin having two rollers revolving in opposite directions, operated by a boy or girl at each, by which five pounds of cleaned cotton was made per diem. Nothing but hand gins, resembling the cotton hand mills of India, were yet known in the South, although foot or treadle gins appear to have been in use at this date in Philadelphia and vicinity, some cotton being then raised in New Jersey, Maryland, and Delaware. A great improvement in the treadle gin was made about the year 1790, by Joseph Eve, of Providence, Rhode Island, then residing in the Bahamas, and was patented by him in 1803. It was a double gin, with two pairs of rollers placed obliquely one above the other, and by adding iron teeth and pulleys, was made by a little assistance to feed itself. It could be worked either by horse or water power. Mr. Pottle, of Georgia, substituted two single rollers for the double ones, and produced a gin very popular in that State for some time. The present form of foot or treadle gin was first introduced into Georgia from the Bahamas, in 1796. It was improved in 1820 by Mr. Harvie, of Berbice, who obtained a patent, and afterwards by another person, who obtained a patent in the United States for making rollers hollow, to prevent them from becoming hot while revolving. Other improvements on the roller gin were patended in 1823, and subsequent years by Eleaser Carver, of Bridgewater, Massachusetts, who in 1807 commenced the manufacture of saw and roller gins in Mississippi and Lousiana, then a new country without saw mills—of which he erected one of the first in these territories—or any machinery for manufacturing the several parts. The Whittemores, of West Cambridge, also secured patents for improvements on the roller gin, which was in some respects superior to all others, but was found to injure the staple, and was abandoned. Other modifications of these machines were introduced by Birney, Simpson, Nicholson, Farris, Logan, Stevens, McCarthy, and others, several of which were popular in their day, and preferred in certain sections of the cotton States. The machines of Farris and Logan were improvements upon Eve's mechanism, and at a recent period were still used to some extent with steam-power. Jesse Reed of Massachusetts, inventor of the tack machine, patented cotton gins in 1826 and 1827, the latter for cleaning Sea-Island cotton, and the eminent American inventors, Jacob Perkins and Isaiah Jennings, each labored in this field. The roller gin is especially adapted for clean the long staple of Sea Island cotton, the long, silky, delicate fibre of which is injured by the saw gin. In the original machines, a pair of rollers worked by one hand would make about twenty-five pounds of clean cotton in a day. A recent improvement by Mr. Chichester, of New York, consisting of a fluted roller of polished steel, and one of vulcanized rubber, &c., is said to clean 200 pounds per diem, without crushing a seed. The Parkhurst roller gin, though costly, is deemed a superior machine in Alabama and other cotton districts. The Lousiana cylinder gin for short staple cotton, made by Jenks, of Bridgesburg, Philadelphia, is also much esteemed for completely removing all extraneous matters without injury to the fibre. But as the Upland short staple, or black seed cotton, was the first variety cultivated in the South, a means of removing the seed from its tenacious envelope was early sought, and happily supplied by the genius of Eli Whitney, a native of Worcester County, Massachusetts, under the patronage of the widow of General Greene, of Georgia, and her husband, Mr. Miller. Whitney's saw gin, patented in March 1794, was the first cotton cleaning machine recorded in the United States Patent Office. Its appearance produced intense excitement, and numerous infringements of his patent rights, which involved him in expensive and vexatious lawsuits, and finally drove him into other enterprises, in which his ingenuity achieved reputation and success. In 1796 Whitney and partner had their machines in operation in Georgia by animal or water power, and in December, 1801, the legislature of South Carolina purchased the right for that State at a cost of $50,000, and threw it open to the public. One of the early invasions of the patent was by Hogdon Holmes, of Georgia, who also patented a saw gin in 1796. Two other Georgians the same year took out patents for saw gins, and in 1803 another was taken for a saw gin by G. F. Santonstall, of North Carolina. Among other improvements on gins made by Mr. Carver, before mentioned, who had long experience in their manufacture, was the grate patented by him in 1823, which being placed where the seed is arrested and the fibre taken from it by the saw, prevented clogging, and the delay of cleaning the saw, &c. In 1837 he patented an improvement in ribs for saw gins. Mr. McCarthy in 1840 connected a vibrating saw to the roller gin, adapted it for cleaning both green and black seed cotton. This machine it was thought would supersede Whitney's, the fibre cleaned by it having brought three cents per pound more in the Mobile market than that cleaned by the latter.

The manufacture of cotton gins has long formed a branch of business in the machine shops of the Northern and Middle States, and an independent business in several Southern cities. One of the earliest and most extensive of these concerns was that of samuel Griswold, at Clinton, Georgia. In 1833 the business was commenced in Autauga County, Alabama, by Daniel Pratt, a native of New Hampshire, who had learned the business with Mr. Griswold. He there manufactured cotton gins of superior quality for the neighboring Southwestern States, including many for Texas, and even New Mexico, and acquired reputation and fortune in supplying the great demand, which required a branch house in New Orleans. His large accumulations were employed in erecting saw and planing mills, one of the first flouring mills in Alabama, grist mills, large cotton and cotton gin factories, and other factories and tenements, forming the flourishing village of Prattville, where in 1851 he employed 200 hands, and made annually about 600 gins. He had manufactured since 1833 upwards of 8,000 cotton gins. In 1846 he received from the University of Alabama the honorary degree of *master in the mechanic arts*, for the intelligent and benevolent exercise of his mechanical ingenuity and ample means.

## JOURNAL OF RAILROAD LAW.

### REDEMPTION OF ROAD FROM MORTGAGE—WHAT THE PURCHASER OF THE EQUITY TAKES.

Many of our great lines of railway run through different States, and from this circumstance, their rights and liabilities are frequently subject to different and diverse rules of law. Thus in the case of Wood *vs.* Goodwin in the Supreme Court of Maine, the question was whether, when a company, whose road lies in two different States, under charters from each of those States, mortgages the whole road and franchise, and their right to redeem in one State is sold on execution, the purchaser of the equity of redemption is entitled to redeem the *whole* road from the mortgage. The court held that he is so entitled. In this case, the bill alleges that the Great Falls and South Berwick Branch Railroad Company, a corporation established by the laws of the State, was seized, Sept. 1, 1854, in fee or otherwise, of a railroad lying within the County of York, and running to the line of the State of New Hampshire, and of the real estate upon which that railroad was located (a particular description of which is not necessary,) as trustees for the Eastern Railroad Company, the said railroad, with the franchise, real estate, easements, &c., to secure certain bonds, some over due, and some not yet due; that, on 1st day of June A. D. 1855, the plaintiff commenced an action against said G. F. & S. B. B. Railroad Company, which was duly entered in court and such proceeding were had, that, on the sixth day of December A. D. 1857, he recovered judgment against said company for $22,101 damages, and $483 58 cost of suit; upon which judgment execution was issued in due form of law, and was placed in the hands of the sheriff of York County for service; and he seized on said execution all the right in equity which said corportation then had of redeeming said railroad and its franchise from said mortgage, and after due proceedings, sold and exeeuted a deed of the same to the plaintiff, January 1858; that the respondents entered into possession of said railroad, &c., April 20, 1858, for the purpose of foreclosing said mortgage, and had ever since remained in possession; that, on the 20th day of November, 1860, he demanded of them a true account of the amount due on the mortgage, and of the receipts, &c., but that they had neglected and refused to render such account; that the

plaintiff is ready to perform all the conditions of the mortgage, and he prays that he may be let in to redeem, that the respondents may be ordered to account, and that, on payment of the amount now due on the mortgage, he may be let into possession.

The answer alleges that the G. F. & S. B. B. R. R. Company, claiming to be the owners of a longer railroad than that described in the bill extending from a point in Maine to a point in New Hampshire, made the mortgage referred to in the bill, embracing the portion of the road lying in New Hampshire as well as that lying in Maine, and denies that any separate mortgage of the portion in Maine was ever made; that the respondents have no knowledge that the plaintiff commenced the action, obtained the judgment, or purchased the equity of redemption, as alleged in the bill, save from common report; that he did call upon them by letter for an account as alleged in the hill, and they had not rendered any to him, hut that their hooks were constantly open for inspection, as he well knew; that they took actual possession of said railroad in both States, Dec. 29, 1857, for the purpose of foreclosing said mortgage and fulfilling the duties of their trust; that said possession was commenced, and held under judgments of the courts of Maine and New Hampshire, and that the foreclosure of said mortgage had become absolute long before the plaintiff called upon them for an account; and that they are lawfully in possession of railroad, under said judgments and foreclosure, for the purpose of fulfilling their trust duties, and that the plaintiff will not, upou the payment of what he proposes to pay, he entitled to disturh their possession. A copy of the mortgage, and of the judgments referred to, are annexed to the answer.

Thc judgment in New Hampshire was rendered by the Court of Common Pleas, holden at Dover in the County of Stafford, on the third Tuesday of August, A. D. 1857. Judgment as on mortgage. Execution issued by which the respondents were put in possession of the railroad, &c., Dec. 28th, 1857. The judgment in Maine was rendered hy the Supreme Judical Court, held at Alfred, in and for the County of York, on the first Tuesday of January, A. D. 1858. Judgment as on mortgage. Execution issued by which the respondents were put in possession of said railroad, April 20th, 1858.

The provisions of the mortgage which embraced the road in Maine and New Hampshire, do not become material, except the provision that the mortgagees were to leave the possession and control of the railroad in the mortgagors nntil condition broken.

The plaintiff introduced attested copies of the judgment, execntion, officers' return thereon, and the sheriff's deed to him which it is not necessary to recite, as no question was raised in regard to the regularity of these proceedings.

The opinion of the court was drawn up by Davis, J.—This is a bill in equity, to redeem the Great Falls and South Berwick Railroad from a mortgage to the defendants, in trust, to sccure the payment of certain honds. The mortgage was given Sept. 1, 1854. After the bonds first payable become due, the defendants, as trnstees, took possession of the railroad for condition hroken. The right of redemption was afterwards sold by the plaintiff, upon an execution in his favor against the railroad company; and having purchased the right of redemption himself he demanded an account of the trustees under the mortgage which they neglected to render.

If the special acts of Maine and New Hampshire, passed in 1848, had heen fully accepted hy the Great Falls and Conway Railroad Company, and the Great Falls and South Berwick Railroad Company, these two companies would have been merged in the new one, hy the name of the Portsmouth, Great Falls and Conway Railroad Company. In that case there would be no valid mortgage and no equity of redemption. But as neither of the special acts appears to have heen accepted according to its terms, we may assume that the Great Falls and South Berwick Railroad Company continued to exist, and that the mortgage is valid. Nor do we perceive any reason why the plaintiff, upon the case as stated and proved, is not entitled to redeem.

A part of the railroad is within this State, and the other part in New Hamsphire. Whether there were two distinct corporatisns, or one only, under the charters granted hy the two Legislatures there was hut one mortgage, and that embraced the whole railroad. The plaintiff proceeded upon the assumption that the mortgage was valid. He cannot deny it. He has no claim if it was not, and the mortgage embracing the whole railroad, hoth in this State and in New Hampshire, the plaintiff must redeem the whole if any. And, in order to do so, he must provide for the whole debt secured hy it. For the mortgagees have a lien upon every part of the railroad to secure every part of the debt. A part of the honds secured hy the mortgage are due; the rest have not yet matured. The trustees have taken possession.

It is contended for the plaintiff, that he may pay up the amount now due, and be entitled to take possession, and hold it until the condition shall again be hroken hy a non-payment of the honds next maturing. But this is not the case. The trustees having taken possession for condition hroken are entitled under the mortgage, to retain possession until the whole debt is adequately provided for, without requiring them to rely upon the mortgage.

So long as any necessity appears for them to rely upon the security, they are entitled to possession. The plaintiff will not he permitted to eject them, without paying all that is due, and depositing money, or otherwise providing for the payment of the remainder as it shall become due.

But the plaintiff, by paying all that is now due, will save a forfeiture. He will thus be placed in the position of the mortgagors; and the right of redemption will not be foreclosed.

The trustees will he entitled to possession and must account for thc earnings. And if the plaintiff shall pay them enough with the earnings to discharge all the honds as they become due, he will then be entitled to possession. Whether the necessary proceedings have been had to give the plaintiff title to that part of railroad lying in New Hampshire is a question which the Court in this State have no power in this case to determine. A master may be appointed to determinc the amount now due and payable, after deducting the earnings of the railroad since the defendants took possession.

---

Richmond and Danville R. R.—The first train since the evacuation of Richmond will leave Manchester this morning, and will proceed without interruption of communication to Danville. Passengers going to Lynchhurg, however, take stages at Farmville, at Burkville Junction, hetween which points the distance is seventeen miles. On reaching Farmville they again find cars in readiness to carry them the remainder of their journey.—*Richmond Republic, June* 24.

## LIABILITIES OF RAILROADS

FOR DELAYS IN STARTING OR ARRIAAL OF TRAINS.

It is a well known rule that a common carrier is liable for any delay in the transportation of merchandise; and hy analogy, it would seem that railways should he liable for not delivering passengers within the stipnlated time. Where time-tables and advertisements are issued hy companies stating that a train will start at a particular time, they thereby place themselves under a contract to start such train, and carry all parsons who present themselves as passengers; and if they omit to run the train, and a person who intended to he a passenger thereby proceeds to the station for that purpose, and tenders his fare, and incurs inconvenience or other extra expense in getting to his destination, they are responsible to him for a breach of their contract. And if such time-tahles or advertisements he issned and continued hy the company, knowing that the train will not start, this is a false representation on their part, for which they are liahle to the party deceived. (Denton *vs.* Great Northern Railroad Company, 5 E. & B., 86.) And where a railway train was hired for an excursion by a society, and the tickets were sold and distributed hy the society's secretary, from whom the plaintiff purchased his, it was held that these facts constituted the plaintiff a passenger. (5 Exch., 789.)

In the case of Hamlin *vs.* Great Northern Railroad, (38 Eng. L. & Eq., 335,) the plaintiff took passage in a train which was advertised to go through the same night to the point of his destination, hy connecting with the trains of an other company. It proved, on arriving at the point of connection, that the other train had laft. The plaintiff was compelled to stay over night and proceed the next morning, having to purchase a new ticket for the remainder of the route, and did not arrive till one o'clock the next day. When he took defendants' train, he paid for and took a ticket through, and by the time tables advertised in defendants' office, he should have arrived at his destination at 9:30 P. M., having taken the train at 2 P. M.

The plaintiff might have accomplished his journey that night, by taking a special conveyance and hiring a hoat to cross the Humher, hut he slept at a hotel and proceeded the next morning by the puhlic conveyance, hut arrived to late to meet his customers according to appointment, and was obliged to hire conveyance to see some of them elsewhere, and was detained several days waiting for the market day to see others. It was held that he was only entitled to recover his hotel expenses and the railway fare the next day, and was not entitled to recover any damage whatever in consequence of not reaching his destination according to defendants' undertaking. This case seems to have taken rather an extreme view of the rule of damages on this subject. The very least the defendents could have expected to pay for the breach of duty should have been, it would seem, the expense of a special conveyance through that night. The rule here adopted seems to be almost equivalent to a denial of all heneficial redress in such cases; for it is scarcely to be supposed that action would ever he brought to recover such insignificant damages. It is quite supposahle that one might suffer very serions loss in consequeuce of such a failure to arrive in time, and if an action is maintainahle, it should not he made a terror by attaching to it a rule of damages which will render it as expensive to the plaintiff as to the defendants, who are solely in fault. It seems also at vari-

anee with such former decisions in the English courts. Martin, Baron, who tried the case at Nisi Prius, seems to have placed it upon the ground that the defendants, having no knowledge of plaintiff's business or its neeessities, could not fairly be supposed to have undertaken to indemnify him against this loss. But the learned judge eoneeives the defendants may stand upon the terms of their eontract. And if the plaintiff, instead of remaining over night, had gone forward the same night, as he might have done, and as by the contract he was entitled to do, the defendants would have been liable for the additional expenses. This may, perhaps, be the more just and practicable rule, in cases where the parts had ample time to proceed by express in season for his appointments But if, instead of doing so, he delays for the next train, and thereby suffers damage beyond what would have been neeessary to defray the expense of going forward according to the eontract, we see no reason why the eompany should not, at all events, bear that portion of the loss which was neeessarily incurred in consequence of their breach of contract. (See Redfield on Railways, 343, note.)

We are not aware that railway companies have been, in this country, subjected to many suits of this character, but in England such suits are not uncommon. It is, however, entirely competent for the company to make a special contract by a proper notice that the company will not be responsible for the due arrival of trains. But the rule remains that a passenger is entitled to be carried from the usual place of taking up to the usual place of setting down, and the carrier can not at any intermediate place refuse to proceed, the undertaking to carry to the journey's end being absolute. (Dudley *vs.* Smith, 1 Camph, 167.) The company is bound to convey with reasonable expedition, and if its course of business is inconsistent with that, it is no answer to an action against it for damages arising from delay, that it carried at the ordinary rate in which it conducted business. (Blackemore *vs.* Lancashire and Yorkshire Railway Company, 1 Fost. & Fin., 76 )

The most important case in this State is Weed *vs.* the Panama Railroad Company, (17 N. Y., 362.) In that case it was proved that in August, 1854, the plaintiffs (a husband and wife) were passengers on a train of cars of the defendant from Obispo to Apinswall, about thirty miles distant. The train proceeded about seven miles on the route to a place called the Barbacoas Switch, where it was detained during the night, and did not reach Aspinwall until the afternoon of the day following. There were about four hundred passengers on the train, who remained in the cars during the night from inability to procure other accommodations. The weather was stormy, and the wife was taken sick in the night and experienced great suffering; and evidence was given tending to prove that in consequence of the detension, her health was greatly and permanently injured. The ground of the defense was, that the detention of the train was the willful act of the conductor, done without the authority or approval of the Company.

The court held that this was no defense.

The court says: "The obligation of the defendant was to carry the passenger to the place of destination with all reasonable diligence and dispatch, but the conductor stopped the train on the route unreasonably, in known disregard of his duty; the defendants did not send forward as it was their duty to do, providing another conductor if that was necessary, and that it was negligence of the defendants. It must be assumed, in the absence of any finding or even proof to the contrary, that it was practicable for the defendants to forward the train without injurious delay."—*Railroad Journal.*

## THE LABOR QUESTION.

In almost every branch of labor, there is just now more or less dispute between the operatives and their employers upon the question of wages. As the consequence of the close of the war, three principal causes are in operation tending toward a reduction in the price of labor. First, the decline in gold; which has necessitated a reduction in the prices of commodities, for which employers seek a compensation in a proportionate reduction in wages, the chief element in the cost of products. Next, a cessation of the large demand for commissary, ordnance and other war supplies, without any compensating increase in the ordinary demand from civilian consumption; a striking result of which is apparent in a decline of 1,000,000 tons in the production of coal since January 1st, and in the iron works of the country being only half employed. And third, in the return of an immense number of discharged soldiers to the ranks of labor. The two first of these causes tend necessarily toward a large reduction, temporarily of the demand for the products of labor; while the last mentioned produces an increase in the supply of labor, to which must be also added the important element accruing from an unusual importation of well trained operatives from Europe. The combined operation of these causes necessarily produces, for the time being, a glut of labor, the natural and inevitable tendency of which is toward a reduction in wages. This, employers, backed by the condition of the merchandise and labor markets, peremptorily demanded; while the laborers as stubbornly resist the attempt, asserting that, during the late rise in prices, wages were not advanced in proportion to the enhanced cost of living, and that, now that prices are declining, they should not be asked to follow closely the reduction of prices; and further arguing that prices are even now so high that their wages are only adequate to procure for them an average amount of necessaries and enjoyments. Thus the dispute stands; and, for the purpose of precipitating its solution, both sides are resorting to such measures of coercion as their circumstances permit, the employers discharging a portion of their hands, and the operatives taking associated action and unitedly refusing to accept the terms offered by the employers.

The chief strength of the operatives, in the struggle, lies in their concerted action. During the last six or eight years, co-operative associations have been formed in every branch of labor, and these separate associations have again their joint organizations, not merely of local dimensions but extending over the entire country, and some embracing even world-wide affiliations. The co-operative associations possess large funds, subscribed for emergencies like the present one, and the moneys so held are distributed among the members, the better to enable them to endure the privations attending a strike.

Deeply convinced as we are of the justice and the national importance of the American laborer having a full equivalent for his toil, yet we can not but regard this concerted action of the operative class as ill adapted to secure that end. The truth is that the laborer's interest is protected by natural laws, which determine the amount of compensation he shall receive. The laborer can not aid those laws in working out their results; though he may, and by these efforts does, impede temporarily their operation, with a sure penalty to himself. The price of labor is determined in the same way as the price of any commodity, by the law of supply and demand. The individual laborer has to compete with his fellow laborers of the United State; and the laborers of the United States have to compete with those of all other countries with which we have direct or indirect commercial intercourse. Thus, if the co-operative associations of this country fix upon a scale of wages which disable their employers from selling their products in competition with the products of European labor, the latter then take the place, in our markets, of domestic commodities; the result being that home producers have to lessen their production, which means discharging a portion of their hands and inevitably compelling a reduction of wages. Thus natural law ultimately defeats those who have combined to supersede its operation.

The labor associations of the United States can accomplish nothing for themselves in the way of permanently enhancing wages unless they could, at the same time, insure a corresponding rise in all the other labor markets of the world. And even then the advantage would be but momentary and apparent. For the enhanced cost of products, resulting from advanced wages, would compel a limitation of consumption, which, by reducing the world's production, would again reduce the demand for labor, compelling through the competition of individual laborers an ultimate fall in the price of labor. Again, during the temporary prevalence of higher wages, the laborer has to pay an enhanced price for all he consumes; so that what he exacts from the producer the merchant again takes from him in selling to him the products of his labor. Thus, the laborer is bemmed in on every side by natural law, which his own effort can neither help nor hinder; and it is therefore his true policy to leave the determining of his compensation to those laws; using, at the same time, every possible associative efforts for improving his intellectual and physical condition and attaining proficiency in his specific employment; which in truth is the only means nature has left him for promoting the enhancement of his wages.

We occasionally hear a great deal of unmeaning talk about the oppression of capitalists in the matter of wages. Fortunately for the workmen, Providence has not left him helplessly subject to the cupidity of his employer. The capitalist, like the operative, is controlled by natural laws, and the rate of wages he pays is not determined by his arbitrary will, but by the competition of other employers in the labor market, as well as by the supply of laborers. If a capitalist pays his workmen less than their labor is worth, he soon finds himself compelled to give the average wages, through the willingness of other employers to pay higher rates. There can not, properly speaking, be any oppression of the working classes by the employers of labor, where fair competition is not hindered by legislation. For suppose that, by a combination of capitalists, the wages of a given division of labor were reduced unreasonably low, the remedy would speedily come by a two-fold process. First, the extra profits realized in that branch of industry, in consequence of the reduced wages, would immediately induce an

increased employment of capital therein, which again would create an extra demand for that class of labor, producing naturally an advance of wages. Or, were not this the case, yet the reduction wages would drive men from that employment, producing a scarcity of laborers, which would equally have the effect nf bringing up wages to the proper level. In this way do natural arrangements protect the workmen against the cupidity of the employer, and insure to the laborer the hire of which he is worthy. All the talk about an antagonism between labor and capital is sheer nonsense. Such antagonism can never go far beyond intention; as a fact, it can never exist beyond a very temporary period. Competition for labor as much prevents the capitalist from enforcing low wages upon the operatives, as competition for employment prevents the operative class from exacting higher wages than the capitalist can afford to pay. These opposing forces are the only antagonism between capital and labor; and in a normal condition of society they meet in a *juste milien*, where both parties derive the utmost advantage that in the nature of things is possible.

---

Railroad-Car.—The Wason Manufactnring Company have just completed a new and elegant "ladies' car" for the Passumpsic Railroad to run between White River Junction and Newport, Vt., on Lake Memphramagog. The interior of the car differs from ordinary paesenger-cars in having a saloon, 13 by 7, which is carpeted and furnished luxuriously with a tête-á-tête, chair, marble-topped table, etc. The panels and walls are mahogany and black-walnut, and among the many decorations of the saloon are several handsomely painted views from the vicinity of Lake Memphramagog. The car is supplied with a water-tank containing 40 gallons, the water from which passed through a coil, 50 feet in length, which is placed in a refrigerator filled with ice the water thus becoming delightfully cool without containing any melted ice. The car cost complete abont $8,000. Among the large number of cars which the Wason Company are now constractiug is an elegantly ornamented one, which is to run between Jersey City and Harrisburgh. The interior is profusely supplied with delicately colored bits of scenery, while on either side of the exterior are portraits, nearly of life-size, of Grant and Lincoln. Among the cars just completed are several strongly-built express-cars, built for the Adams Express Company, to run on some of the Southern railroads.—*Springfield Republican.*

---

Atlantic and Great Western R. R. Co.—At the annual meeting held at the office of the Company in Kent, Ohio, on Tuesday, the 11th inst., the following named gentlemen were elected Directors for the year ensuing, viz: S. S. L'Hommedieu, Cincinnati, O.; Marion Kent, Kent, O.; T. W. Kennard, New York; W. G. Hamilton, New York; J. W. Tyler, Warren, O.; O. L. Wolcott, Farmington, O.; E. P. Brainerd, Ravenna, O.; John Sherman, Mansfield, O.; Jacob Crail, Ashland, O.; Jacob Riblet, Gallion, O.; J. H R. Rose, Cleveland, O.; D. McLaren, Cincinnati, O.; Gaylord Church, Meadville, Pa.

Subsequently the Board organized, and the following officers were chosen: President, S. S. L'Hommedieu; Vice-President, Marion Kent; Secretary, Wm. H. Grant; Treasurer, E. P. Brainerd; Attorney, J. W. Tyler; Superintendent, D. McLaren.

[From the San Francisco California Farmer.]

## THE COLORADO RIVER.

### THE OPENING OF THIS GREAT HIGHWAY.

Colonel Warren.

*Dear Sir:*—As you have expressed a desire to gain addition information in reference to the successful navigation of the Colorado River, and the magnitude of the business which must be done with this city and State in consequence of the opening up of this great highway, I take the present occasion to give you a few facts.

That the Colorado River is navigable with steamers, at *all seasons*, for six hundred miles from its mouth, and to within three hundred and eighty miles of Salt Lake City, is an *established fact.* This has been practically demonstrated by Capt. Trnworthy, of the "New Union Line." The steamer *Esmeralda* and schooner *Victoria*, belonging to this Company, will long be remembered as the pioneer vessels of this enterprise. It is not my purpose at this time to allude to the hostile course pursued by those who have sought from the first to crush out this individual enterprise, so important to the nation and the entire Pacific coast. My former communications, published in the papers in this city and Utah, can attest the facts here set forth.

The general course of the Colorado for six hundred miles is north and south. For the first one hundred and twenty-five miles there is excellent land and timber from five to twenty-five miles in breadth, The soil is very rich, and is capable of raising all kinds of grain. Above this section along the river, at intervals of from ten thirty miles, are beautiful valleys, extending for miles along the banks of the stream, the green grass and timber of which produces an impressive effect upon the spectator as he suddenly emerges from the deep cañons which separate them, in some of which the perpendicular rocks stand up one thousand feet high. At each change of position new and startling beauties are revealed, the grandeur of which are so different from that of other rivers, that the mind can scarcely realize that what is seen is reality. All the richest colors of the rainbow can here be found, extending far over the highest summits of the loftiest peaks, or confined within the compass of a few hundred yards. To these favored localities the admirer of Nature can come with the fullest assurance that he can in these solitudes look upon scenery which in grandeur and magnificence are unequalled upon the American continent.

In the vicinity of the present head of navigation is an excellent farming section. From here to Salt Lake City there is a good wagon road. This road passes through forty-two cities and towns, containing a population of sixty thousand. These houses are built of stone, adobes and of brick, and present a splendid appearance. The water being carried to the settlements from the adjoining mountains is conducted down each side of the well laid out streets, it is impossible for the country to suffer from drouth. The consequence of this is they have a regularity of good crops, and are enabled to meet the great demand from the surrounding mining country. These settlements have been established within a few years, for the direct purpose of producing cotton, in which they have been very successful. Much grain and fruit is also raised here. By the opening up of the Colorada river a complete change has been produced upon the country, and that portion which was heretofore considered to be upon the frontier is now the centre, where a large population have been and are still wending their way. Goods can be delivered there by the Colorado river at one-sixth the price charged for bringing them by the old route from the Missouri river. The trade of Utah, Montana, and a portion of Nevada and Idaho, must be diverted to the Colorado where it can be done at less than one-half the rates of that of any other rnute, and the road has the additional advantage of being traveled at all seasons of the year. Within the last few months over $250,000 would have been expended in this city by merchants from these localities who came here to purchase, but owing to the suicidal action of the Legislature of this State in reference to the legal currency of the United States, they were reluctantly compelled to go to New York.

The saving of Utah Territory alone by this route will amount to over *three millions yearly*, not taking into consideration the great benefit to be derived by the General Government in the transportation of supplies to the interior. We are wararnted in saying this trade of 230,000 persons must soon be done by the Colerado river. Is it not then of the utmost importance to this city and State to secure the benefit of this growing trade? If *prompt action* is not taken by the merchants and mechanics of this city, it will pass from their hands forever. A line of steamers once established from Panama, San Francisco can expect nothing, and her present trade will feel a great diminution.

That California and San Francisco have natural advantages over all other places is self-evident, but it is equally true that whilst enjoying their advantages they have depended too much on *these alone.* The time has come when necessity should compel San Francisco to act. The main canses which have heretofore brouget capital and popnlation to this great State are now taking it from her. It requires no lengthy argument to establish this unpleasant fact. If anybody doubts the effects of this system of "masterly inactivity," or that equally pernicious system of an association of monopolising powers, as experienced over each navigable stream in the entire State upon the welfare of California, let him recognise the signs of discouraged energy as it totters in onr midst, and the pittance of encouragement offered to agriculture, the *true basis* and *strength* of a country's glory. If the *masses* of the people are to be prevented from realizing the great benefits flowing from an enterprise so important to the interest of the cntire State, by the co-operation and hostility of a powerful Combination Navigation Company, which presumes to dictate at will what *shall* be the action of those who feel the great necessity of opening the trade of the most important river flowing into the Pacific ocean, be it so. The capitalist and others of this city can not complain when this enterprise will be associated with those *abroad*, whose views of public policy and humanity rise higher than the dictatorial powers of a combination company.

Samuel Adams.

---

—Estimated earnings of the Cleveland and Pittsburg Railroad for the month of June are as follows:

| | |
|---|---|
| Freight | $117,320 59 |
| Passengers | 119,806 06 |
| Miscellaneous | 8,500 00 |
| Total | $245,626 65 |
| June, 1864 | 220,472 40 |
| Increase | 25,155 25 |

## THE PACIFIC RAILROAD.

The Pacific Railroad is now being constructed through this country with a rapidity almost unparalleled in the history of railroad building. The hills are being hut down, valleys filled up, bridges erected, and all kinds of railroad work going on as fast as 2500 able bodied men, with a full complement of teams, can do it. It is astonishing to see how much such a force, when directed by able and skillful superintendents and the appliances of modern engineering can accomplish. We had hardly begun to realize that the work had commenced east of Newcastle, before the steam horse was snorting on the hill tops at Clipper Gap, in the heart of the mountains, 43 miles from Sacramento and 1800 feet above the sea. Soon his shrill whistle will be heard at Illinoistown. We learn that the directors have fixed September 1st for that event, and if it can he accomplished in that time it is sure to be done. The work is heavy, but the force is strong and the zeal is irrepressible.

Our citizens now fully realize that the Pacific Railroad is becoming a fixed fact, and not many years will elapse before the completion of this gigantic work will be celebrated, and what a celebration it will he. A continuance of the energy now displayed will soon carry the road over the mountains, and then for a rapid race for Salt Lake. The heavy work on the line west of Salt Lake, is right here in Placer county, and is now being vigorously attacked by the company. We never imagined the work would be so heavy, or that it could be completed so rapidly.

One of the most interesting excursions that can be made hy sight seers is a trip on the railroad line from Clipper Gap to Illinoistown. The cuttings are all in rocks of greater or less hardness, and the hoom of the power blast is continually heard—frowning embankments rise as if by magic—high trestle bridges spring up in a week. Let those who are skeptical about the construction of the work visit that portion of the road and their eyes will he opened.

Persons who have never seen the line hefore the work commenced, or while it is in progress, can form no correct idea of the immense amount of labor required to construct the railroad over the mountains. But the company do their work well, and when finished it will be one of the greatest feats of railroad engineering in the world. Ten, yes twenty, miles of valley road can he made as easily as one of this mountain line. Everything about the road is of the most substantial character. Travelers state that it is not excelled by any railroad in the Atlantic States. For one we are proud of this movement of California enterprise.—*Stars and Stripes.*

---

Washoe.—The mines still continue to turn out their full average of the precious metals, and no lack of confidence in the future is noticed among mining men. During the two first weeks in June, $584,322 worth of bullion was shipped by Wells, Fargo & Co., from Virginia City, and $121,604 from Gold Hill. According to the *News*, there are now in Gold Hill fifteen hullion-producing mines — the lowest product of any one of them, within the last three months, was $19,000; and the largest product of another was $722,000. Virginia Mining District has six bulliou-producing mines—the largest product of any one of them, within three months, was between two and three hundred thousand dollars.

## SHRINKING ON STEEL TYRES.

As the use of steel tyres is enlarging somewhat, the following information as to the best methods of shrinking them ou is given hy Messrs. Prosser & Son, the American representatives of Krupp's Steel Works. :

"The precautions necessary to be observed in shrinking these tyres on to the cast iron wheels are very different to those which obtain in shrinking wrought iron ones on to the same.

To illustrate this, let us examine the amount of shrinkage allowed for wrought irou tyres. Holley, in his valuable work, 'American and European Railway Practice,' states, at page 185, that 'enginc tyres of iron are often stretched one inch, in a length of sixteen feet, which is equal to 1 in 192. Now, in order to get a wrought iron tyre which requires so much stretcbing over the wheel, it must he heated 745 deg. F., allowing 1 dcg. to cause an expansion of 1 in 143,000; and if tyres are heated to 884 deg. or red twilight, we have probahly the lowest practical heat usually given.'

It need not, therefore, create any surprise when wrought iron tyres burst during very cold weather, or even in the process of shrinking them on the wheel.

On the other hand, if a considerable amount of shrinkage is not allowed, then they are sooner liable to become loose from the effect of their hammering upon the rail, particularly under heavy engines, the weight of many of them being sufficient to crush any iron that ever was made.

If the tyres and the rails were incompressible, the bearing would be but a mere line; but, as it is, iron will not bear more than ahout 9,000 lhs. per square inch, without being in danger of crushing.

Cast steel will certainly bear five times this amount of crushing force without injury, and as its elasticity is twice and a half that of wrought iron, the fact of its immense superiurity is at once apparent.

Therefore, in shrinking on Krupp's cast steel tyres, it is only necessary to allow one nenety-sixth of an inch for each foot of the diameter of the wheel, or 1 in 1,152, which is one-twentieth of an inch for a wheel of 57.6 diameter.

Steel expands 1 in 156,200 by each degree (F.) of heat, hence, 137 deg. F. is all that is required to expand it 1 in 1,152. Practically, however, we may adopt as a standard the fusing point of tin of 442 deg. F., as an all-sufficient temperature to expand the cast steel tyres without any danger of over or unequally heating them, for the latter must be carefully guarded against. Now, as to the strain put upon the cast steel tyre, it is difficult to calculate; but, if we assume the cast iron wheel to be compressed as much as the cast steel tyres are expanded hy a shrinkage of 1 in 1,152, that strain will amount to 12,586 lbs. per square inch, which is about one-tenth of its ultimate cohesion.

A climate fall of 100 deg. F. will increase the strain upon the cast steel tyre to 12,987 lbs., per square inch; for the steel will shrink but 1 in 1,570, while the cast iron wheel will shrink but 1 in 1,620. While, on the other hand, an increase of temperature of 100 deg., F., will merely reduce the strain in the same ratio.

If water is applied for the purpose of cooling the tires, it should be done with as much uniformity as is practicable.

The best way of fastening the tyres upon the wheel is to turn a stop or fillet upon the tyre, with a corresponding recess upon tho wheel, on the outside, and rivet the former over the latter, upon the inside.

If, however, screw holts are preferred, they should be screwed into the rim of the wheel, leaving a plain pin only, about ½ in. long, to enter the tyres."

---

The Credit System.—In one important essential we have heen gainers by the war. That curse and scourge of the South, that vile mother of repudiation and bankruptcy, the credit system, is, we hope, dead, and heyond the hope of successfnl resurrection. The people of the South are without money, but they are out of debt. They may be very poor, but they are very solvent.

As soon as Confederate notes took the place of gold and silver, the old credit system collapsed. With a currency first fluctuating, and then steadily and rapidly depreciating in value, sales on time were impossible. The discovery was very soon made that no man was safe who did not "pay as he went." Book keeping in the Confederate States became a very simple and almost useless science, and merchants began to forget the significance of the phrases "hills payable" and "bills receivable." Long before the Confederate currency became too worthless for an honest man to tender it in payment of old debts, it was used in the liquidation of a large portion of the individual indebtedness of the country. Vast numbers of our citizens who were heavily indebted to the banks when the war commenced, paid off their notes, and are now free from debt. To the burden of sorrow which presses heavily upon the shoulders of all of us, we have not added that heaviest of dead weights, "debt." Let us therefore be thankful, and as our antique furniture, unfashionable garments and homely food have heen paid for, we can look the future manfully in the face.

Our object in writing this editorial is to impress upon the people of the Southern States the importance of avoiding anything like a relapse into that dangerous and wretched old system of "long credits." Let us stick to the "cash system," or adhere to it as closely as possible.—*Richmond Times.*

---

Lead Discoveries in Franklin County, Missouri.—Within the past two months, a number of valuable lead prospects have been discovered in various parts of the country bordering on Meramec and Bourbois Rivers. Some of them surpass in richness any thing of the sort that has been discovered for many years past. The present appearances of a number of these prospects indicate a large yield of ore. Out of one shaft alone, at a mine situated three miles east of the village of St. Clair, the parties (four in number) took out over two cords of ore, (80,000 pounds,) the result of fourteen days' labor.—*St. Louis Republican.*

---

Central Railroad of Georgia.—The Directors of the Central Railroad Company, having taken the oath of allegiance, by order of Maj. Gen. Gillmore, have been placed in possession of the road and its property, subject to the control and nse of the military authorities, when necessary, while remaining here. We understand that there is a favorable prospect of the road being put in running order again, as soon as practicable, as the company propose instituting vigorous measures at once for its repair.—*Savannah Herald.*

## MONETARY AND COMMERCIAL.

After several months' trial what was, and what the public regarded, as the termination of the war, gold, after many vacillations, has apparently settled down as a general average of 40 per cent. premium. In reality, estimated by the perfect stability of public credit, and the unquestioned responsibility of the Government, the premium ought not to be a fourth of this; but the same causes which produce a pressure on banks, and sometimes a commercial crash in times of specie payments, now operate to enhance the price of gold. This is the importation of foreign goods and the demand for gold to pay for them. Then there is the additional circumstance, that the Custom House duties are paid in gold, while all other payments are in paper. While this large demand for gold continues, the premium on gold will be large also. Whenever our readers shall see that there is a diminution of importations, or a large increase of domestic exports, then they will see a fall in gold; but till then it can hardly average below 35. The quotations today show it to be 42; but from its high point it will probably fall considerably.

Currency it now sufficiently abundant in Cincinnati; the demands for loans moderate, and the rates of interest reasonable. Business has slackened somewhat in the midst of summer, and it will be several months before the pressure for money will be beyond the ordinary supply. The present series of 7-30s will soon be exhausted, and in regard to the question of bonds, the New York Post says:

It has been stated by persons claiming to possess special means of authentic information, that a fresh issue of 7-30s will be made, and that these certificates, with the maturing five per cents., and the outstanding compound interest notes, will be taken in payment. This opinion, however, has been semi-officially contradicted.

Another opinion, which prevails among a different class of people, is, that when the current series of the 7-30s is closed, the borrowing power conferred by the last loan act of Congress will be exhausted.

This is an obvious error, as the act specially provides that no long bonds issued for the funding of outstanding short obligations "shall be considered as part of the amount of six hundred millions hereinbefore authorized."

The Secretary of the Treasury, in addition to the third series of 7-30s, has thus the power to issue bonds bearing 6 per cent. interest or less, and maturing in from ten to forty years, in exchange for all the compound interest notes, 5 per cent. notes, certificates of indebtedness, and temporary deposit certificates, the aggregate of which is reported at four hundred millions.

The Detroit Commercial Convention has been the subject of much talk; and has resulted in very little. The main object was to get the General Government to embark in the ship canal business. We judge from the following account given by the Cincinnati Price Current that this project has been defeated:

This convention, which met in Detroit, was in session five days last week, and was composed of a large number of delagates from the States and British Provinces, and doubtless contained more talent than any convention which has assembled in the country for a long series of years; but the talent of the delegates, and the business laid out for the convention, are vastly too great, so that the one could be fully developed, and the other settled within the time allotted for the deliberations of the body; and, consequently, the reports of the several committees were adopted in a crude state, and can therefore have but little influence in Congress. There is no doubt however that much good was done in a social point of view, as regards the people of Canada and the United States, and many facts elicited which will prove valuable. The internal improvement plan of the lake cities was made general, by the resolution of Mr. Mitchell of this city, and which was adopted as an amendment to the reports of the committee on that subject, and this settled the question of ship canals, &c., because it made the plan too general and burdensome to be feasible. If the people of Chicago need a canal to connect the Mississippi with Lake Michigan, their true policy is to induce the State of Illinois to make such canal; and if a ship canal at Niagara Falls is wanted, doubtless the State of New York will grant a charter to enterprising capitalists to make one there, but we hold that these are not improvements which belong to the general Government, and ought not to be regarded as such by Congress.

—The receipts of the Racine & Mississippi and Northern Illinois Railroads for the week ending June 30 were:

| | |
|---|---|
| 1865 | $27,532 01 |
| 1864 | 20,101 18 |
| Receipts from January 1 to June 30: | |
| 1865 | $293,339 64 |
| 1864 | 168,293 91 |
| Increase | $25,045 73 |

—The following is a statement of the earnings of the Marietta and Cincinnati Railroad:

| | 1865. | 1864. |
|---|---|---|
| For the fourth week in June | $34,380 23 | $26,237 39 |
| otal this month to date | 110,185 61 | 75,055 16 |
| Total from 1st of January | 544,456 26 | 465,769 38 |

CONNECTICUT RAILROADS. — The Railroad Commissioners of Connecticut report the following facts about railroads in that State:

| | | |
|---|---|---|
| The chartered capital of the several railroads lying in this State, in whole or in part, is | $23,583,043 00 | |
| Of which there has been paid in | 17,203,531 00 | |
| Total length of road constructed under charters granted, in or in part, by this State, is (miles) | | 789½ |
| Of which is constructed in this State, (miles) | | 697½ |
| The aggregate length of double track is, (miles) | | 125 |
| Making the entire length of track in use, (miles) | | 914 |
| The total income of the railroads in this State during the past year has been | $6,547,385 00 | |
| Their net earnings have been | 2,162,838 52 | |
| Passenger and other trains have run in all (miles) | | 3,086,959 |
| Carrying passengers | | 4,812,613 |

CEDAR RAPIDS & MISSOURI RAILROAD CO.— At a directors' meeting of this road, held on the 17th inst., the following officers were re-elected for the current year: President, L. B. Crocker; Vice-President, Chief Engineer and Secretary, W. W. Walker; Treasurer, Chas. A. Lambard; Executive Committee, L. B. Crocker, W. W. Walker, John I. Brair, Oakes Ames, and Chas. A. Lambard.

There was but one change in the Board of Directors, and none in the officers. The company remains under the same management and control, which has conducted it so successfully from the beginning of the enterprise.

We understand that the company are perfecting plans with a view of building through to the Missouri river in the shortest possible time. The following resolution, which was adopted by the Board, will show the intentions of the company:

*Resolved*, That the President of the Company, under advice of the Executive Committee of this Board, proceed forthwith to put under contract the division of the road between Boone and the Missouri river, with a view to have the bridge over the Des Moines finished before January 1st, 1866, and the whole road through to the Missouri river by January 1st, 1867, if possible.— *Western Railroad Gazette.*

☞ Meetings are being held in the counties along the route of the proposed Iowa Central Railroad, to complete that important link in the direct communication between St. Louis and St. Paul, via Oskaloosa and Cedar Falls. The North Missouri Railroad has made provision to extend its track from Macon City (junction with the Hannibal and St. Jo.,) to the State line, a distance of sixty miles, and the condition of the whole route may be shown by the following table is distances:

| | Miles. |
|---|---|
| From St. Louis to Iowa State line | 234 |
| From State line to Cedar Falls | 113 |
| From Cedar Falls to Minnesota State line | 96 |
| From Minnesota State line to St. Paul | 120 |
| Total number of miles | 589 |

ROAD ALREADY BUILT.

| | |
|---|---|
| From St. Louis to Macon City | 170 |
| From Cedar Falls to Waverly | 15 |
| From St. Paul south | 70 |
| Total miles completed | 255 |
| Number of miles yet to build | 334 |

NORTHEASTERN RAILROAD.—We are pleased to see by a notice which appears in another column, that the operations of this road are to be resumed on the 10th inst. From what we can learn its officers have made the most strenuous efforts to get it, as soon as possible, in a shape which would enable them to furnish some facilities to our community, and although these must for the present be extended under many disadvantages, nevertheless they will be exceedingly acceptable.

At Florence, connections will be made with the trains for Kingsville and Cheraw, at once placing us in easy communication with points hitherto almost inaccessible. To the people of Columbia the connection to Kingsville will present peculiar attractions at this time.

We hope our Postmaster will not lose sight of this opportunity of establishing mail communication with the portion of the State through which this line passes.—*Charleston Courier.*—July 2.

# COUPON AND LOCAL TICKETS!

## CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

**CONSECUTIVELY NUMBERED**

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

***Ticket Agents and other Railroad Men are invited to call and see our work.***

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD.


## GOVERNMENT TRANSPORTATION.

GENERAL ORDERS No. 17.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., March 16, 1865

1st. For the purpose of producing uniformity in the Transportation service and guarding against abuses, blank books of Transportation Orders will hereafter be issued from this office to the Chief Quartermaster of each Department, to be by him immediately furnished to each officer under his order entitled to issue the same; after the receip of which no other form will be used, unless in emergencies when the prescribed blank form cannot be had, and then the reason for not using it must be stated in the order.

These blank orders will be numbered and registered in this office in such manner that there will never be two orders of the same number in circulation; they will be charged to the Chief Quartermaster to whom sent, who will in like manner charge and hold responsible his subordinate officers.

On exchange of posts, or on transfer to another officer, like receipts must be taken and forwarded to the Chief Quartermaster of each Department.

2d. Within five days after the end of each month, a concise report will be made to the Department Quartermaster of the number of orders issued, the number cancelled by error (which must accompany the report), and the number remaining on hand, with a statement of the amount of transportation furnished in the month; which report in a condensed form (accompanied by the orders so cancelled) will be by him immediately transmitted to the Quartermaster-General, under envelope, endorsed on margin "Rail and River Transportation."

3d. The marginal register should contain the substance of the order issued, and will be preserved by the officer issuing for his own protection, or return to the Department Quartermaster or this office, as may be hereafter required.

*Care should be taken at all times to keep on hand a sufficient supply of these blank orders*, which can be obtained upon application to the proper Senior or Department Quartermaster.

4th. Unless in extraordinary circumstances, all rail and river transportation, passenger and freight, at any post, will hereafter be under the control and management of a single officer, on whom requisitions will be made by other officers requiring transportation.

5th. When more than five persons, in one party, are to be transported over one road, or a continuous line of roads, separate orders for transportation must be issued for each road to be passed over. These orders should be received on the train instead of tickets, and are to be receipted by the party named in the order, and given up on the cars—the officers, or persons in charge, filling the receipt with the number actually carried. Five persons, or a less number, may be carried over a continuous line of roads upon a single order for transportation, and this order may be exchanged at the starting-point for tickets over the entire route.

6th. Settlement should not be made nor vouchers given to railroads on orders for passenger transportation properly belonging to other roads, but the *passenger* accounts for each road should be made up acparately in the name of the roads to which they belong.

7th. Appletons' Railway Guide for January, 1865, will be used as a standard for indicating routes and fixing distances, unless the actual distance is proved to be less, in which case settlement will be made on the basis of actual distance. Where this Guide cannot be more readily procured it can be furnished from this office.

8th. When a number of troops are to be transported from any point to any other point, on the same day or train, it should be done in squads as far as practicable. A single transportation order, or set of orders, should be given to the ranking officer, or most responsible person of the several detachments.

9th. Blank books of Free Transportation Orders will also be furnished, to be used on boats belonging to, or in the service of, the Quartermaster's Department, or on railroads operated by the Government. The free passes in these books will be given to persons entitled to receive Government transportation, and should not be issued without designating on the order the boat or road on or over which the person is to be transported. The marginal registers in these books will also be preserved for return to the Department Quartermaster, or to this office, as may from time to time be required.

Should the route to be traveled be in part over roads or on those owned by private parties or companies, care should be taken that Free and Pay Orders are given as the case may require, or such requisitions furnished as will enable the party entitled to transportation to procure it at points where pay transportation commences.

10th. To warrant the granting of transportation, except in cases specified by Regulations or General Orders, published for general information, the person demanding the same should show a requisition or order from competent authority requiring the movement by public conveyance in the performance of public duty.

The original requisition, when not necessarily required by the officer presenting it, should be retained by the officer furnishing the transportation; in other cases, a certified copy or necessary extract from the order should be furnished to, and preserved by, the officer granting transportation as his proper authority therefor, and a certified copy of the same must be endorsed on the back of the order.

11th. When the cost of transportation is to be reimbursed to the Government, as in the case of sick and furloughed soldiers, the required certificate should not only be made upon the furlough or order, but the transportation order should also be endorsed on the back substantially as follow: "The within transportation, furnished under General Order ——, and the proper officers duly notified. ——— ———
A. Q. M."

12th. When transportation is granted to persons not in the military service, full explanations therefor should be given

13th. Orders for transportation should give the name of the party to be transported, or if there are several, then of the officer or person in charge, and state the number of men to be transported.

Orders for "one man," "ten men," and the like, without designating any name, are improper

14th. The receipts for transportation should be filled up in ink by the officer or person named in the order before signing, and if he cannot write his name, there should be a witness to his mark.

Names and places should be written distinctly in full, and not abbreviated.

15th. Duplicates of orders for passenger transportation should not be issued.

16th. When a requisition calls for transportation to any given point and return, the order should be issued to the place of destination, and the return transportation should be obtained at that point, provided it can there be procured.

17th. Upon the form of order now issued should be presented all the facts necessary to enable an auditing officer to decide as to the regularity or propriety of the order, so that it may be paid by any authorized disbursing officer.

18th. Erasures, interlineations, or alterations, if made against the interest of the Government, should be explained on the order by the issuing or other competent officer; otherwise, the transportation should only be settled for in accordance with the order before change or modification.

19th. Transportation by water being generally the cheapest should be selected when consistent with the interests of the service. All transportation should be furnished by the shortest practicable route, unless a different route is indicated in the order which directs the movement. Where there are two or more competing routes without material difference in distance or time, the business should be divided in equitable proportion between them, the distance for which compensation is made being estimated by the shortest practicable route.

20th. In no case is subsistence furnished by the Quartermaster's Department.

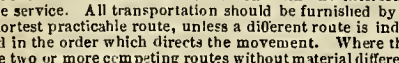
21st. The good of the service requiring that railroads should obey the requisitions of officers properly authorized to demand transportation, in case compensation is made by the Government for illegal or unauthorized transportation so required, the officer making the requisition or issuing the order will be charged therewith, or if not paid by the Government, the railroad will be entitled to recourse upon such officer.

By order of the Quartermaster-General.

LEWIS B. PARSONS.

*Colonel, and Chief of Rail and River Transportation.*


## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAIL ROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

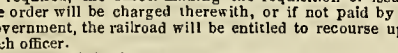
H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

## Change of Time, Sunday, June 18th.

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:00 A. M., and 10:30 P. M.
Arrive at Cincinnati.....7:30 A. M., and 7:20 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO



## *STEAMSHIP COMHANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side-wheel STEAMSHIPS, between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | | |
|---|---|---|
| WASHINGTON | 3,204 tuns, | 900 horse-power. |
| LAFAYETTE | 3,204 tuns, | 900 horse-power. |
| EUROPE | 3,254 tuns, | 900 horse power. |
| FRANCE | (afloat), | 900 horse power. |
| NAPOLEON III | (afloat), | 1,100 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table-wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its exuivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to

GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

## NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building) | 3,412 | ——— |
| ENGLAND (now building) | 3,430 | ——— |
| SCOTLAND (now building) | 3,430 | ——— |
| ERIN | 3,310 | Grace. |
| HELVETIA | 3,315 | Prowse. |
| PENNSYLVANIA | 2,872 | Grogan. |
| VIRGINIA | 2,872 | Lewis. |
| LOUISIANA | 2,166 | Axplett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to

WILLIAMS & GUION, No. 71 Wall street.

For steerage passage apply to

640* WILLIAMS & GUION, No. 29 Broadway.

## STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN | $90 00 | STEERAGE | $30 00 |
| First Cabin to London | 95 00 | Steerage to London | 34 00 |
| First Cabin to Paris | 105 00 | Steerage to Paris | 40 00 |
| First Cabin to Hamburg | 100 00 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

## FOR SOUTHAMPTON AND HAVRE, The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR ..... 2,595 61-95 tuns.
WISLIAM R, BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge.

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

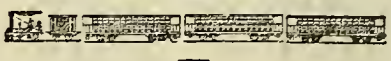
Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to

640* JAMES A. RAYNOR, No. 10 Barclay street.


## CENTRAL RAILROAD —OF— NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Manch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twedty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m.; 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.) 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

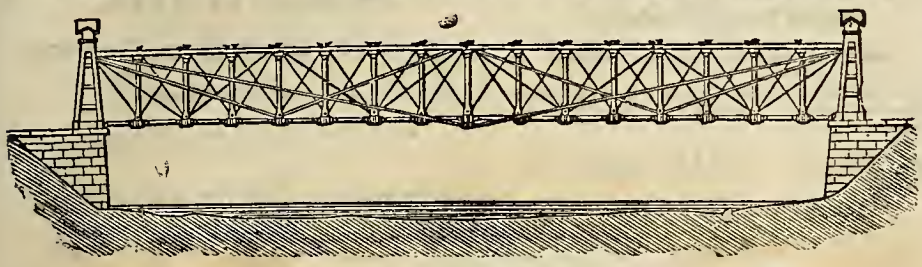
JAMES H. HOYT, Superintendent.

## NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, als connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m., and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, **FINK'S PATENT IRON BRIDGE**, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

**For plans and particulars, apply to**

mar. 5, '53. 1y. **Letter Box, 1392.** **C. J. SCHULTZ, Pittsburgh, Pa.**

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

**CINCINNATI.**

**BRIDGE BOLTS,** Rivets [illegible], with Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27,1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance-cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive En-

419 y I

---

## KNOX & SHAIN,

**Engineering and Telegraphic**

INSTRUMENT MAKERS,

**PHILADELPHIA.**

---

## JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS.

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles,**

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

Manufacturers, Importers & Dealers

—IN—

**RAILROAD, CAR,**

—AND—

**MACHINE SHOP**

**SUPPLIES,**

—AND—

**MACHINERY OF EVERY DESCRIPSION**

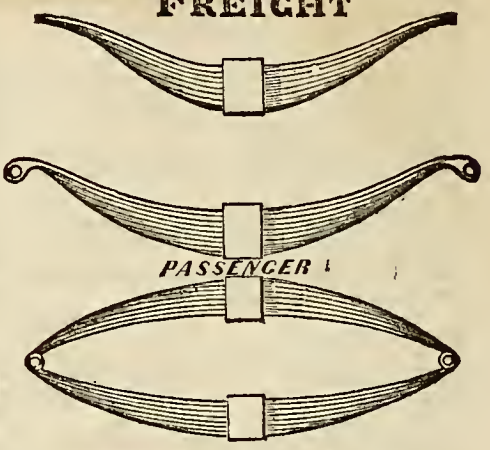
**47 West Front Street, Cincinnati.**

PERKIN LIVINGSTON & POST

---

RAILWAY SPRINGS.

**FREIGHT**




THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS,**

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledge himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Step Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

**W. M. F. HEWSON,**

## STOCK BROKER,

**No. 21 West Third Street,**

**CINCINNATI.**

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a the

*Bridges & Track are again in Substantial Condition.*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river aud Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West aud Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe. than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHING. TON CITY.

W. P. SMITH, *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M |
| Cio. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A M. |
| do do | | 6 15 A. M. |

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Barnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Ibnses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Citiei.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at.....4:00 P. M. & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

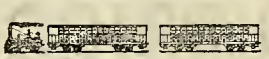
☞Trains of the Ohio & Mississippi Railroad run by me TWELVE MINUTES SLOWER than Cincinnati me.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of M street

C. E FOLLETT,
Ge eral Ticke Agent.

W I. GRISWOLD nera' Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago n advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 5:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, snd run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, C ncinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2 MOSELEY & CO.
BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Bailroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continne to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facili es for forwarding the r work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cn to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—2½ to 24 inches in diameter, and branches, for same. &c.,

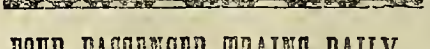
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**



## FOUR PASSENGER TRAINS DAILY

**RAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express).

On Sundays, 10.24 P. M.

☞Through connections made for all points East a Wes

WM. EARNS SUPT

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, - - } Editors

CINCINNATI:
THURSDAY, JULY 27, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| *Atlantic & Great Western—* | | |
| | 9:00 A. M. | 7:30 P. M |
| | 10:30 P. M. | 7:30 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond, Chicago and Indianapoiis | 7:00 A. M. | 9:45 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:50 P. M. |
| Richmond and Chicago | 7:00 P. M. | 11:25 A. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | 7.00 A. M. | 8:05 A. M. |
| Dayton Accommodation | 2:20 P. M. | 9:45 P. M. |
| Eastern Night Express | 10:40 P. M. | 7:55 A. M |
| *Indianapolis & Cincinnati—* | | |
| Chicago and St. Louis Express | 7:00 A. M. | 12:00 P. M. |
| Springfield and St. Joe Express. | 1:00 P. M. | 5:10 P. M. |
| St. Louis and Chicago Express | 4:00 P. M. | 2:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 4:50 P. M. | 8:35 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:40 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 7:00 A. M. | 9:45 P. M. |
| Connersville, Cambridge City & Indianapolis Express | 3.30 P. M. | 12:50 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis. Cairo and Louisville | 7:20 A. M. | 8:00 A M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P, M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 7:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 8.00 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 6:00 A. M. |
| Evening Express | 2:35 P. M. | 10:12 P. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton. Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapoli & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## REVIEW OF FOREIGN COMMERCE, CUSTOMS AND BALANCES.

In the anomalous condition of commerce and finances at the present moment, the results of foreign trade, (although not one tenth of domestic trade in amount,) or the balances of our foreign trade, really regulate the money market; because it determines the demand for gold, and with that the price and the relative value of currency. From the New York tables of exports and imports given below, and the known proportion which they bear to the whole, we have the following results in round numbers:

| | |
|---|---|
| Foreign goods consumed in the United States } Deducting goods re-exported for year ending June 30, '65 } | $190,000,000 |
| Foreign goods consumed in the year June 30, 1865 | 275,000,000 |
| Diminution of the amount of foreign goods consumed | $85,000,000 |

In the meantime, however, the tariff on foreign goods had been considerably raised; and the results on the tariff were as follows:

| | |
|---|---|
| Customs dutics in 1863–'64 | $86,000,000 |
| " " 1864–'65 | 102,000,000 |
| Diminution of customs | $16,000,000 |
| The diminution of importations | 30 per cent. |
| The diminution of customs duties | 16 " |

The diminution of imports did not really arise from the high tariff; but from the extreme uncertainty as to demand and price in the last year of the war. In the last two or three months importations have been rapidly increasing, and as the exports of cotton and tobacco will be greatly enlarged, it may be taken for granted that both imports and duties will both be greatly increased in the coming year. The *average* tariff in 1865, in all goods imported, was 45 per cent.; and the average of 1864 was 37¾ per cent. The customs are received in *gold*, and exceeded by $28,000,000 the amount of *gold interest*; and nearly equals the whole amount of interest due.

The total amount of revenue received by the United States Government in 1864–'65 was ($292,000,000) two hundred and ninety two millions; but if, after paying the gold interest ($58,000,000) we reduce the remaining gold ($28,000,000) to currency of 40 per cent, it makes nearly $12,000,000 increase; so that, in point of fact, the Government actually received $304,000,000, enough of it being gold to pay the gold interest. This is a very favorable exhibit of the revenue; but if we take into view the improvement of the internal revenue laws and the increased importations, there can be no reasonable doubt that the revenue of 1865–'66 will amount to *four hundred millions of dollars*, and this will be enough to pay our expenses and raise a sinking fund. To that point we must raise the revenue, even if we increase the taxes. There is now a fair prospect that we can get revenue enough without increasing the taxes. We certainly shall if the commissioners now sitting in New York have sense enough to regulate the relations of the internal revenue and customs duties, so that they will not now rise against one another and neutralize the effect intended to be produced by each. What we want in this country now more than any one thing is *broad minded statesmen*, and capable of devising and carrying out a comprehensive system of finance and of internal and foreign policy. Where are they?

Let us now look at the results of our foreign commerce in relation to the general trade of the country; and to the amount and value of gold in the country.

The following exhibit is given in the N. Y. *Tribune*, viz:

The gross importation for the fiscal years 1864 and 1865, respectively, at New York, including the small sums of foreign specie entered from month to month, was as follows:

| | 1864–'5. | 1863–'4. |
|---|---|---|
| Foreign merchandise | $159,868,842 | $232,867,988 |
| Foreign gold and silver | 1,890,431 | 2,099,057 |
| Gross importations | $161,779,273 | $234,967,045 |

The export clearances to foreign ports, from New York, for the month of June were:

| | June, 1865. | June, 1864. |
|---|---|---|
| Domestic produce | $8,079 802 | $17,936,495 |
| Foreign re-exported | 166,842 | 1,357,927 |
| Gold and silver | 5,199,472 | 6,533,109 |
| Total June clearances | $13,440,116 | $25,887,531 |

The comparative exports of all descriptions from the port of New York, for the fiscal years 1864 and 1864, respectively, were:

| | 1864–'5. July 1 to June 30. | 1863–'4. July 1 to June 36. |
|---|---|---|
| Domestic produce | $184 617,834 | $161,842 911 |
| Foreign re-exports | 18,254,911 | 7,082,865 |
| Specie | 39,589,259 | 58,274,220 |
| Total | $242,462.044 | $227,199,996 |

The exports of domestic produce, in declared currency value, for the fiscal years 1864 and 1865, respectively, compare as follows with the gold value of foreign merchandise taken for actual home consumption at the port of New York:

| | 1864–'5. | 1863–'4 |
|---|---|---|
| Domestic produce exported | $184,617.634 | $161,842,011 |
| Foreign goods consumed | 135,695,631 | 205,421,304 |
| Average price of gold | 204 per cent. | 155 per cent. |

The comparative prices of gold on the 15th of each of the twelve months are as follows:

| | 1864–'5. | 1863–'4. |
|---|---|---|
| July | 249 | 128 |
| August | 256 | 124 |
| September | 228 | 131 |
| October | 215 | 156 |
| November | 238 | 147 |
| December | 235 | 149 |
| January | 221 | 155 |
| February | 204 | 160 |
| March | 174 | 161 |
| April | 160 | 174 |
| May | 130 | 181 |
| June | 144 | 194 |

Taking the port of New York as a common standard, and in point of fact it is 80 per cent. of the whole, we have these *data* for calculation:

| | |
|---|---|
| Exports (including re-exports) | $202,000,000 |
| Profit of foreign merchandise (1865) | 160,000,000 |
| Balance in our favor | $42,000,000 |
| Exports of gold (deducting imports) | $37,600,000,000 |

The *exports of gold* are twenty millions less than in 1864. Excluding gold, there is still a slight balance of trade in our favor. Under these circumstances it is rather singular that

the price of gold should be kept up so uniformly; but there are still reasons for it. The constant demand for gold to pay duties, which for a time are held up in the Treasury, is one reason; and another reason is, that to pay previous balances, we have been, and still are, exporters of gold. Looking to the future, we think the price of gold must decline considerably this autumn. It would decline rapidly and immensely; but for the fact that the *grain crops of the country are deficient.* The exportation of grain, therefore, will be less than usual. But on the other hand, the exportation of tobacco and cotton will be vastly greater than it has been in four years past. We consider, therefore, that by the 1st of November, the price of gold must decidedly decline.

It will be seen by the above table of gold prices that the *average decline* in the premium on gold was *fifty per cent.* Let us see now what must be the effect of that on the value and volume of currency. The *amount of active currency* in the country has not materially varied in the year past, and has been very nearly *nine hundred millions of dollars.* We see above, that the average price of gold in July, 1864, was 150 per cent.; and in July, 1865, 40 per cent. That is, since July, 1864, the premium on gold has declined 110 per cent. Now, reducing the currency to gold value in July, 1864, and July, 1865, we have these results: In July, 1864, $900,000,000 currency; in gold, $360,000,000. In July, 1865, $900,000,000 currency; in gold, $643,000,000. Considering gold as the standard of values, the currency of the country has actually increased 80 per cent. in amount. For if the paper currency were replaced by a gold currency on July 1st, 1864, it would be replaced by $360,000,000; but, on the 1st July, 1865, it would be replaced by $643,000,000. This is true, looking only to gold values; but as our paper money has one important quality in common with gold, it does not in practice produce so great an effect. The National currency is a *legal tender;* hence it will perform nearly all the offices of money as well as gold. It is nevertheless true that the real amount and value of currency has greatly increased.

In this review of our financial and commercial condition, we see much that is hopeful. The National debt is large; but the means of paying the interest and accumulating a safety fund are ample, and the commercial condition of the country is rapidly improving. There can be little doubt that for several years the balance of trade will be in our favor. If this be true, the price of gold will decline to a very low point.

Of the resumption of specie payments, we entertain no such sanguine hopes, as many do. In our opinion, it will be several years before specie payments are resumed, and we are heretics enough to believe it not desirable to resume gold payments immediately. It can not be done safely till gold gets much lower than it is; and it will get lower, if the Government conducts its financial affairs warily, and we keep the tariff at a high point. *Let well enough alone,* is an old and wise maxim.

## ATLANTIC AND GREAT WESTERN RAILWAY.

A meeting of the bondholders of this company has been held in London, and an exposition of its affairs given. The facts stated are as follows:

| Length, viz: | |
|---|---|
| Cleveland to Dayton | 386 miles. |
| Cleveland Extension | 51 " |
| Coalfield Branch | 32 " |
| Silver Creek | 6 " |
| Total, complete | 475 " |

Extensions are being constructed to Buffalo, New Lisbon, and Niagara, making 132 miles. The Mohming Railroad (81 miles) is leased, making in all 688 miles. The road has 126 locomotives, 91 passenger cars, 16 baggage cars, and 2,566 freight cars. The receipts of the road in the past year have more than doubled. Mr. Evans, the English Director of the Erie Railway, was present, and bore his testimony to the energy of Mr. Kennard and Mr. McHenry, and to the high character of Mr. L'Hommedieu, the American chairman of the company. A vote of thanks was passed to Mr. Kennard and Mr. McHenry, and on a subsequent occasion Mr. Kennard was honored with a banquet at the Palace Hotel, London, Sir Morton Peto occupying the chair.

## PITTSBURG & CONNELLSVILLE R. R.

If we mistake not, the following decision refers to the road which has been heretofore under the change of B. F. Latrobe, C. E.; and whose rights were attempted to be destroyed, almost a year since, by the Pennsylvania legislators. We are glad to see this decision, and trust the Pittsburg & Connellsville road will now go on to completion:

SOUTHERN PENNSYLVANIA R. R.

Pittsburg, July 18.—Judge Grier, in the United States Circuit Court, has given a decision in the case of Baltimore City *vs.* The Southern Pennsylvania Railroad, involving the constitutionality of the act disfranchising the Pittsburgh and Connellsville Railroad. The Pennsylvania Legislature of 1864, it will be remembered, passed an act transferring the rights and franchises of the Connellsville company to the Southern Pennsylvania road; and, as the city of Baltimore had a mortgage for one million dollars on the former road, which the transfer of its rights to another corporation would render worthless, in a measure, the matter was brought before the United States Court and argued at length, at Williamsport, Pa., in June last. Judge Grier has decided that the act of the Pennsylvania Legislature is unconstitutional, and has issued the injunction prayed for by the complainant. Thus securing to Pittsburg and the West another outlet to the East, and a direct route to Baltimore and Washington city, unless reversed by the United States Supreme Court.

## CINCINNATI & ZANESVILLE R. R. COMPANY.

We have before us the annual report of this road, prepared by Erasmus Gest, the President. It is a very interesting document, and demonstrates two things pretty clearly: 1. That the road is *not* now profitable; 2. That it *may* be made profitable. The fact is, that the Cincinnati & Zanesville Road is a road *without termini*, of any kind. The result is, it is like a tube, into which something is poured, and goes out at the other end; but *in which* nothing remains. There is something at both ends and on the sides, but this intermediate tube holds nothing. Now, there are just two remedies for this condition of affairs. It must get *termini* for itself, or, it must sell itself out to those who have. Either will do, and one must be done; but, the former will be the most profitable, if the present owners are intelligent and enterprising enough to do it. Mr. Gest makes a very good argument, on this point, which we shall quote, as of general interest. In the mean time, we shall note some of the general facts disclosed in the report. Our readers will remember, that this road was sold, under a general arrangement with the bondholders. The present capital stock is $3,000,000. The receipts and expenses were:

| | |
|---|---|
| Receipts | $412,000 |
| Expenses | 291,252 |
| Net receipts | $120,745 |

This is 4 per cent. profit. But, the depreciation of the road is very considerable, and there is no surplus to meet this. Perhaps, the road as it is may be made to pay 6 per cent., but more probably it will not. There remains, therefore, the final question, whether it will sell itself out, or, whether it will make *termini* for itself. We quote here Mr. Gest's argument for the latter.

THE COUNTRY AND POPULATION.

From Morrow to the Sciota River the geological formation of the country occupied by this road is limestone, with clay soil; beyond it is sandstone, the soil being lighter and sandier. The extreme eastern twenty miles lie in, but well toward the western verge of, the great Ohio coal basin. The area of country directly and better accommodated by this road than by any other averages about sixteen miles wide, and is not surpassed in fertility by any other of equal superfice of the contiguous land in Ohio. It is probably, if not the oldest, one of the earliest settled sections of the State, embracing no unarable or wild land; sixty per cent. of the area being actually cultivated, the remainder being the reserved wood lands of the various farms, and all of it capable of high cultivation. Bituminous coal, iron ore, limestone, fire-clay, and salt water abound in the coal-field section of this area. But thus far, with the single exception of coal, these minerals remain un-

disturbed, and have not contributed to the business of the road.

The population that depends upon this railroad is estimated to be 111,427, or at the rate of 52 to the square mile. For some years it has not increased to a material extent; in fact, the population has been almost stationary. In population and wealth this section stands above the average of the State; in fact, ranks with the most popular and wealthy outside of the immediate vicinity of large cities. About nine-tenths of its population are agriculturists, and generally native born, and do not travel much. Their productions are almost exclusively of a character that, to reach market, must be carried at a rate yielding but a small margin above actual cost of carriage; the revenue from which, in connection with that derived from the exceedingly small amount of imported articles that such a people consume, secures a regular and reliable but limited business, just sufficient to operate and maintain a railroad. It is upon this limited business the Company has had heretofore, and must continue, to rely upon, so long as the road remains *uncompleted* into Cincinnati, according to the charter; or until a combination is had with other railroad interests that will secure that desideratum.

During six and a half years there were delivered to the Little Miami Road 123,534 tons, and only 35,706 received from that road; 106,599 tons were delivered to the Central Ohio Road, and only 9,597 received. It appears, therefore, that this road is a great gathering reservoir, out of which flows abundance to others, but for which no return is made by them. In fact, the Little Miami and the Central Ohio, which *should* be our *feeders*, are really the *barriers* to our success.

The practical working of the road has demonstrated and made patent many things, which might have been foreseen and accepted as truths, among which are:

1st. That a belt of country sixteen miles wide, of rich and well cultivated soil, fine climate, and with a population (whose pursuits are mainly agricultural) of 52 to a square mile, or 830 to each lineal mile of road, does not of itself furnish business sufficient to compensate fairly the necessary capital required to construct and equip what is understood, by popular minds, an adequate railway; but that it does furnish business more than sufficient to merely operate and maintain the property.

2d. That it is not to be expected that a railway company will extend towards a *dependent* road those fair principles of reciprocity which all right-minded individuals, engaged in commercial and manufacturing pursuits, do to their patrons; but that it will receive *complacently* all business a dependent road gives, and treat with obdurate stolidness all things looking to a reciprocal return of trade.

3d. That railroads costing $25,000 per mile, built through a country exclusively agricultural in its population, do *not* pay profit to the capital invested in it, *if its business exclusively depends* upon said inhabitants, *unless* they *number* 1,700 or *more* per lineal mile of road.

4th. That every company which looks beyond its termini for business, and that from necessity must pass over other railroads to *their* commercial centers, should, before commencing its construction, effect arrangements with the companies on which it depends to reach said centers, for an agreed division of the trade, or for all the facilities necessary to compete for business; otherwise it must remain powerless, and all attempts to materially increase its net receipts by going beyond its termini will prove futile. That full remuneration of capital invested can only be accomplished by extending its line into commercial centers, or by alliances founded upon fair reciprocity with those lines that do go there, and upon which it depends.

*The Little Miami and Columbus and Xenia, and the Cleveland and Columbus Railroads, relatively considered.*

THE LITTLE MIAMI ROAD

Is eighty four miles long, and lies between Cincinnati and Springfield. The Columbus and Xenia is fifty-five miles long, and a branch of the Little Miami. The two, for all practical purposes, are a unit, and connect the great western metropolis with the political capital of Ohio; their united length being 139 miles. The section of country whose people are directly, and it may be said solely, dependent upon the Little Miami and Columbus & Xenia Roads, or better accommodated by them than by any other, does not exceed a belt twelve miles wide, with a population of about 141,000, or 1,014 per lineal mile of road. Probably not half of these people are agriculturists, the other portion belonging to the professional, commercial and manufacturing class. Such people travel more than an agricultural community, and their mode of living is also more favorable to an interchange of those commodities that yield the largest profit to a railroad.

The year 1860, before the war, is probably the best suited for analysis, and for furnishing a gauge of the actual business results of the Little Miami and Columbus and Xenia Road; and an examination of its statistics for that year leads to conclusions that will enable this matter to be fully understood, as well as show the real cause of the superior prosperity of that road as compared with the Cincinnati, Wilmington and Zanesville Road.

In that year the business was as follows:

LOCAL PASSENGERS.

197,705 over sections of the road.
13,245 " whole length "

Total.....210,950
Revenue from same.....$211,706 00

LOCAL FREIGHT.

124,298 tons over sections of road.
21,132 " whole length "

Total....143,430
Revenue from same.....235,026 43

Local receipts for 1860.....$446,732 43

THROUGH PASSENGERS,

146,908. Revenue.....$336,838 28

THROUGH FREIGHT,

200,771 tons. Revenue...438,922 15

Total thro' receipts for 1860..... 775,760 43

Aggregate of the two..... $1,222,492 86
To which add revenue for mails, express, commutation, &c..... 67,351 98

Gross revenue for 1860 ..... $1,289,844 84

Thus it appears that, with all the advantages of the commercial metropolis at one terminus and of the political capital at the other, only about 36 per cent., or say 446,732 43 out of $1,289,844 84, was from its local business. This is only double the local business of the Cincinnati, Wilmington and Zanesville Road, dependent as it is. Their other trade upon which they depend for prestige and profit has been obtained, and is now with them, from peculiar circumstances, which may to a great extent change in the course of time. Even now, its receipts are kept up under much competition, and subject to be gradually diverted. The capital invested in the joint property approximates to six millions of dollars. The question, whether this capital shall continue to enjoy high interests and dividends depends directly upon the point whether it can retain its through business, and in this lies its capacity to render investments in its securities more profitable than those securities of the Cincinnati, Wilmington and Zanesville Road, raised to an amount equal to the actual cash cost of the property.

THE CLEVELAND AND COLUMBUS ROAD

Is one hundred and thirty-eight miles long, and connects the capital of the State with an exceedingly important lake port. The area of country which it better accommodates than any other road, is a belt about 16½ miles wide, (very nearly the same as that tributary to the Cincinnati, Wilmington and Zanesville,) with a population of 153,000; two-thirds of this population are probably agriculturists. An analysis of its annual report for 1860 warrants the following division of its business, viz.:

LOCAL BUSINESS.

101,151 passengers carried,
Revenue.....$103,418 00
123,951 tons freight carried,
Revenue..... 198,710 95

Total local receipts for 1860.....$302,128 95

THROUGH BUSINESS.

92,129 passengers carried,
Revenue.....$251,162 59
172,885 tons freight carried..... 398,195 33

Total through receipts.....$649,357 92

Aggregate of the two..... $951,486 87
To which add revenue for mail, express and rents..... 121,935 08

Gross revenue for 1860.....$1,073,421 95

From which it appears that, even with the political capital of the State at one end and a commercial lake port at the other, its local business is about 34 per cent., say $332,000, out of $1,073,421 95, and only some 60 per cent. more than that of the Cincinnati, Wilmington and Zanesville Road in its present dependent position.

Thus, like the Little Miami and Columbus and Xenia, is the Cleveland and Columbus Road dependent upon its foreign business to meet its interest obligations and expectations of its stockholders—in amount nearly five millions of dollars.

These two roads combined form a highway across the State of Ohio, which thus far has succeeded in securing and retaining the lion's share of railway business. Their receipts have rapidly increased since 1860: that of the Little Miami and Columbus and Xenia, in 1864, being about $2,400,000, and of the Cleveland and Columbus nearly $2,500,000; the sum of the two vary but little short of five millions. These roads are indeed successful and productive; but the capital now invested in the Cincinnati, Wilmington and Zanesville Railroad, as well as that necessary to complete its extension east and west, would be equally valuable, as the cost of the new line will be less than the cost of those two roads, and may yield even larger dividends.

CINCINNATI EXTENSION OF THE CINCINNATI AND ZANESVILLE R. R.

Between Morrowtown and the city the country is very favorable for the construction of the road at moderate cost; it will pass for its whole distance through the oldest settled and wealthiest portions of Warren and Hamilton Counties, and afford an expeditious junction with the Ohio and Mississippi, and Indianapolis and Cincinnati roads on the west side of the city. It will do this in 33 9–10 miles, thus not only be a shorter road into the city than the Little Miami, but also save in distance over that road, between Morrow and Common Point, on west side of city, 5½ miles, of which 1½ to two miles is a thronged business street, subject to a most vexatious municipal control.

The cost of this section of road, built in the best manner, including station houses, shops, right of way, fencing and lands, (excepting only the depot grounds, and passenger and freight station buildings in the city,) and assessing iron delivered at $100 per ton, labor $1 75 per day, and other things relative in cost, will be $1,700,000; of which $330,000 is estimated for right of way and real estate for depot purposes; and if arrangements could be made to avoid the construction of the four miles next the city, $1,400,000 would suffice.

MILLERSBURGH EXTENSION.

To connect Zanesville with Millersburgh, on the Akron Railroad, requires the building of 53¾ miles. It lies all the way in a valley, offering every facility for rapid construction at a low rate, probably as low as any 53 consecutive miles of any road in Ohio. Its cost—iron at $100, delivered, and labor $1 75 per day—including depot buildings and lands, right of way, fencing, telegraph, &c., will be inside of $1,700,000.

These two sections of new road, in connection with the sections already completed, at a fair price, form an entire road to Hudson, via Lebanon, Lancaster, Zanesville, Coshocton, Millersburg and Akron, 279 miles long, aggregating in cost less than $8,000,000, including a fair equipment of rolling stock, and in all other things complete; and would, through the Cleveland and Pittsburgh road, form a good competitive road between Cincinnati and Cleveland, and through that road, the Central Ohio, Pittsburgh and Columbus, and Fort Wayne and Chicago, establish business relations with the *four* great eastern trunk lines, and giving this road connections to New York and all the eastern cities second to no road in Ohio.

By this line, thus perfected, a local population occupying the square miles set forth below, would be accommodated and be dependent upon it.

| | Population. | Sq. miles. |
|---|---|---|
| Cincinnati Extension | 63,070 | 208 |
| C., W. & Z. Road | 112,427 | 2,144 |
| Millersb'gh Extension and Akron Road | 101,028 | 1,533 |
| Total | 265,525 | 3,905 |

The local population and area of country embraced by the Little Miami and Columbus and Xenia, in connection with the Cleveland and Columbus, is as before stated, and here recapitulated:

| | Population. | Sq. miles. |
|---|---|---|
| L. M. & C. & X. | 140,000 | 1,589 |
| Cleveland Columbus | 152,897 | 2,281 |
| Total | 293,897 | 3,867 |

The comparison of these figures shows, that the *new* or Cincinnati, Zanesville and Cleveland line would have very near as much local trade as the line through Columbus; and taking into consideration that less capital is to be made productive, the comparison becomes still more in our favor. We have a right to presume that a liberal share of the foreign and through business would be secured to the Zanesville route.

It is, however, the writer's opinion that there is and will be a foreign business amply sufficient to remunerate the capital employed in the Zanesville route, and also in the Columbus route; that business is not now satisfactorily served, and would of course receive a strong stimulus by the greater expedition afforded by an additional route. It needs but little study of the map, in connection with the trade of the great West, and knowledge of railway business, to corroborate this view of the case.

The writer has not spoken of the railroads mentioned, with any intention of disparaging or lessening their importance in the eyes of the public; his purpose has been, as it is his duty, to institute legitimate and pointed comparisons, so as to afford full appreciation and understanding of all matter pertaining to the Cincinnati and Zanesville Road. He has no mercenary motives to subserve in laboring for full success, and he will have accomplished his object if he succeeds in informing the public at large, and the proprietary interest of our road, of the real condition of things, stripped of all extraneous matter, as well as any illusory calculations.

## RECEIPTS OF EXPRESS COMPANIES.

The internal law is revealing some curious information, which never could be obtained without it, and which, it seems to us, there is little propriety in giving to the public. But in the case of express companies, whose business is entirely of a public nature, there can be no objection. From the returns made, it seems the receipts of express were as follows:

| | |
|---|---|
| Adams' Express Company | $2,467,952 |
| American " | 1,281,684 |
| Harnden's " | 217,371 |
| Wells, Fargo & Co | 304,885 |
| Other Companies | 303,000 |
| Total | $4,575,090 |

The real economical results of the express companies cannot be known without some further information. Would the losses by damage, interest, &c., have equaled four and a half millions, if there had been no express companies?

WILMINGTON AND MANCHESTER RAILROAD.—We have been favored says the Savanah Republican with the following interesting extract of a letter from the General Superintendent of the above road, giving a statement of the present condition of the road:

OFFICE GEN. SUP'T W. AND M. R. R.
Sumter, S. C. June 28, 1865.

*S. S. Solomons, Esq.:*

DEAR SIR: As a matter of public interest I would state the following facts. If you see fit you can allude to them publicly. The work of rebuilding the Wilmington and Manchester Railroad is progressing rapidly. Trains of cars will pass from Kingsville (its junction with the South Carolina Railroad) to Wilmington, N. C., by August 15th, 1865. From Wilmington North there is now daily connection. Trains are now run on this road semi-weekly. They will be increased to daily as the business justifies. Great want of mail facilities is felt here. I could carry a mail semi-weekly from Little Pee Dee to Kingsville, 37 miles now. This mail could reach this road at Florence from Charleston, via Northeastern Railroad. The Cheraw and Darlington road connecting at Florence, is now open to Cheraw. An examination of the map will show this is a very large scope of country which could now be supplied with mails. I will post you on railroad matters as they transpire.

Your obedient servant,
HENRY M. DRAKE, Gen'l Sup't.

## WAR HISTORY OF THE BALTIMORE AND OHIO RAILROAD.

The position of the Baltimore & Ohio Railroad has been one of peculiar interest during the terrible war from which we have just emerged. The swaying to and fro of the contending armies across its track, as well as the use that has been made of it as a means of transporting troops and munitions, have all been watched with feelings of the most intense anxiety throughout the progress of the struggle by the people of the loyal States. Although much of the war history of many of our important railroads may never be written, yet such as may come under our observation we shall take pleasure in placing in our columns, not only in justice to the railroads that have done and suffered so much in our holy cause, but also, although somewhat foreign to the objects of our paper, as a tribute to the strong arms and noble hearts that have done so much in their and our defense.

The work of guarding the Baltimore and Ohio Railroad, from Washington City to Parkersburg, on the Ohio river, a distance of about four hundred miles, was one of the most important services performed by any part of the army, in the war that has just terminated. Two or three isolated facts will serve to illustrate this truth, which will become more evident as the history of the war is gradually revealed. Owing to the peculiar location of the road, its proximity to the seat of war, and its relations to the war itself, it has been called upon to transport fully ten times as many troops, and ten times as much ammunition, as any other railroad in the Union.

On the 20th of August, 1862, the officers of the road received orders from the War Department to move the division of General Cox from the Gaulay region, in Western Virginia, to Washington. The circumstances under which this order was executed exhibit in a strong light the excellent management of the road, under the most trying difficulties. The prompt and rapid transportation of these 8,000 troops was of the greatest service to the Government at that time, which was the period just as Gen. Pope's battles in Virginia were commencing. This was considered, and justly so, a great feat at the time, but it has since been surpassed by instances of railroad transportation of far greater magnitude and importance. In October, 1863, the movement of Gen. Hooker's two corps from Washington to the West, to join Gen. Rosecrans in his campaign against Chattanooga, took place on this road. On this occasion 23,000 troops, with their equipage and ammunition complet, and their train of 1,800 wagons, were safely and rapidly transported from Washington to Wheeling. More recently Gen. Scofield's army of 25,000 men were transported over this road, from Wheeling to Washington, to co-operate with Gen. Sherman in North Carolina, and to take part in the final battles before Petersburg. There are prominent instances of the value of that railway as a military road. They are all surpassed by the great movement which has taken place within a few days past, and which exceeds anything in the history of railroads. We allude, of course, to the transportation to the West, from Washington, of 150,000 of the troops recently assembled around the national capital. This movement, which has been made safely, and almost without accident, may properly be regarded as the climax of the many and great military services rendered by this road.

The vast importance to the Government of having it at all times in running order, and of having it well stocked with cars and engines, was as apparent to the rebel authorities at Richmond as to our own Government. Hence the persistent efforts of the rebels to destroy the road, and hence the necessity of keeping it well guarded.

In the latter work, a Pennsylvania regiment (the 54th Pennsylvania Volunteers,) played a conspicuous part. The service which the regiment rendered was of too signal a nature to be allowed to pass into oblivion; and we propose in this article to do justice to the brave men who, as will be seen, performed the task entrusted to them with a courage that never faltered, and with a devotion that no hardship could weaken. If, in what follows, we speak chiefly of the gallant colonel of the regiment, it will be understood that this is done merely for convenience, and because he was the head and soul of the regiment. If he had not been seconded by the zealous co-operation of his intelligent and devoted officers, and by the willing obedience and the dauntless courage of his men, his admirably arranged plans would have been frustrated by the wily strategies of the ever active enemy. Nor must it be forgotten that Colonel Campbell had, at all times, the prompt and zealous co-operation of the officers of the road, who, on all occasions, were ready to afford him whatever aid he required, and who, at great expense to the company, kept him supplied with ample facilities for transportation, &c. Without this co-operation on the part of the road, Colonel Campbell, of course, would have been unable to carry out his plans with the requisite facility.

The duty assigned to the regiment was to guard that part of the railroad lying west of Harper's Ferry and Martinsburg, from North Mountain station, 107 miles west of Baltimore, to South Branch Bridge, at the mouth of the south branch of the Patomac river, 161 miles west of Baltimore, and 17 southwest of Cumberlend—being a distance of 54 miles—and to picket the adjacent country. Five companies of the regiment were from Cambria county; three from Somerset county, and two from Lehigh county. The regiment was commanded by Colonel Jacob M. Campbell, who, with all his staff officers, are residents of Johnstown, Cambria county.

The regiment left Washington on the 29th of March, 1862, under orders to report to Gen. Dixon H. Miles, at Harper's Ferry. Under the order of Gen. Miles, to locate the companies at ten different points, the following disposition was made of the force :

Co. G, Capt. F. B. Long, at Back Creek, Bridge, 110 miles west of Baltimore

Co. F, Capt. G. W. P. Davis, at Sleepy Creek Bridge, 117 miles, west of Baltimore.

Co. D, Capt. Thos. H. Lapsley, at Alpine Station, 122 miles west of Baltimore.

Co. C, Capt. Enoch D. Yusty, at Great Cacapon Bridge.

Co. H, Capt. John O. Billhelmer, at Rackwell's Run.

Co. E, Capt. Patrick Graham, at No. 12 Water Station.

Co. B, Capt. John H. Hills, at Paw-Paw.

Co. K, Capt. Edmond R. Newland, at Little Cacapon Bridge, 166 miles from Baltimore.

Co. A, Capt. John P. Sutor, at South Branch Bridge.

The headquarters of the regiment were established at Sir John's Run, near the Cacapon Mountains, in Morgan county, Virginia. Col. Campbell soon discovered that his position was one that required the abilities of an administrative and judicial officer, quite as much as those of a military commander. In two of the counties through which his command extended (Morgan and Hampshire,) there was no recognized civil officer or magistrate of description whatever; all the civil and military officers having espoused to the rebel cause. Those of the citizens who remained at home were divided in their political sentiments, and personal ill-feeling existed among them to a great extent.

Nearly all had grievances, real or imaginary, to complain of, and they sought redress from the only power within their reach. Many of the farms along the line of the road, where owners were in the Southern army, were abandoned, the fences destroyed, and the buildings going to ruins. Many families were without a proper shelter, their homes having been destroyed by one or the other of the contending parties.

The first object to which Colonel Campbell devoted his attention, was a complete and thorough examination of the country in a military point of view, so as to guard his troops against surprise. Having accomplished this, he next proceeded to hear and determine the various complaints and disputes of the inhabitants. As he deemed *law* to be out of the question, he resolved to decide all cases brought before him on principles of justice and equity, as far as it was in his power to do so. Many of the vacant farms along the line of the road, whose owners were known to be in the Confederate army, he gave out to competent and worthy persons, "until such time as it should be otherwise directed by competent and lawful authority," upon the condition that after the first year "one-third of the product of said land shall be given over to such officer as may be designated by the Government of the United States, or other legal authority, to receive the same."

All the fences having been destroyed, they were to be rebuilt by the persons farming the land during the first year. By this means many families were enabled to live comfortably, who would otherwise have been reduced to want and starvation. Many of the most evil-disposed persons were compelled by Colonel Campbell to give bonds for their future good behavior; and many who had differences of a personal character, when brought before him, he induced to shake hands in his presence, and become friends. It was not long before this wise and judicious course resulted in greatly ameliorating the condition of the people, and in establishing good order and comparative security. Even the people of secession proclivities soon began to regard Colonel Campbell as a fair and impartial man, and "not such a bad fellow, for a Yankee," as they had expected to find him.

The men under his command had the most positive orders not to interefere with the private property of any citizen, or to molest them in any manner in their lawful pursuits. These orders were implicity obeyed, and in the course of a couple of months the troops and the citizens of the country were on the best terms with each other, and all went on smoothly. Had a similar policy been pursued everywhere in the South, much bitterness and ill-feeling would have been avoided. In the southern parts of Morgan and Hampshire counties, however, there were many lawless characters, who continued to commit depredations upon their more peaceful neighbors near the rail

road. Frequent complaints were made against them, particularly in Hampshire county, where an organized band of guerilias had been formed under one James Edwards.

Frequent expeditions were sent out for the arrest of Edwards and his party, but Edwards always eluded the military, while many of his partisans were captured In one of these expeditions, sent out from Little Cacapon under Captain Newhard, Edwards was shot through the hand. On another sent out from No. 12 Water Station, under Lieut. Lewis, his brother was shot in the head. Neither of them were ever captured, as their intimate acquaintance with the country enabled them to elude pursuit, and the more peaceful citizens held them in such dread that they would give no information of their whereabouts. Their captured partisans were brought to headquarters, where they were confined in the old cooper shop, just back of the railroad station, at Sir John's Run. They were afterwards sent to Harper's Ferry, Baltimore, or Washington, according to the grade of their offence, or kept in confinement and then released on giving bonds and taking the oath of allegiance. The old cooper shop prison at Sir. John's Run will long be remembered by the citizens of Barkeley, Morgan, and Hampshire counties.

On Sunday, May 25, all the locomotives and cars on the railroad west of Harper's Ferry were sent towards Cumberland, the engineers and firemen on the trains giving the first news of the expected approach of the rebel General Jackson towards Martinsburg, and the retreat of General Banks. The news caused the utmost consternation among the citizens along the line. Colonel Campbell, who was on the mountain south of Capau bridge at the time, arrived at the railroad in time to stop and detain the last locomotive on the road, as it was in the act of passing, and ordered it back to Sir John's Run, as he expected the telegraph wire would be cut, and communication interrupted between the different parts of his command. At nine P. M., Colonel Campbell received the following dispatch from Gen. Miles, at Harper's Ferry: "Concentrate your regiment at South Branch. General Banks is defeated and driven through Martinsburg. We expect an attack here hourly, and intend to fight." The wires were cut a few minutes afterwards, and thus all telegraphic communication east of Sir John's Run was destroyed.

Colonel Campbell telegraphed west of Cumberland for cars to take his regiment to South Branch over which stream there was an elegant and substantial iron bridge, the only one between Harper's Ferry and Cumberland that had not been destroyed by the rebels the year before. It was of great importance that this bridge should be protected. The engine, which had been detained at Sir John's Run, was sent by Colonel Campbell as far down as Back Creek, to remove the company there to Sleepy Creek, six miles farther east; and also to notify the other companies to prepare to leave. Captain Long's company, at Back Creek, piled their camp and garrison equippage on board the tender and locomotive, and fell back to Sleepy Creek. They left the bridge about midnight. The rebel pickets advanced as they fell back, and set fire to the bridge, the light of which was plainly visible before the company arrived at Sleepy Creek.

On Monday, May 26th, a train of cars arrived from Cumberland. and all the companies were successfully taken on board. The regiment arrived at South Branch the same day, and encamped on the slope of the hill, at the west end of the bridge. On the 28th a reconnoissance was sent to Cherry Run, but no satisfactory information could be obtained below that point. On the 31st Colonel Campbell, with 450 men, made a reconnoissance as far down the road as Back Creek, where the bridge was found destroyed, but no enemy in sight. The same night he returned to South Branch, and telegraphed to Gen. Miles, by way of Wheeling, the state of affairs, and asked if he should resume his former position on the road. He received no answer.

On the 1st of June, after having repeatedly asked for orders, and not receiving any reply, Colonel Compbell sent two companies, under Major Linton, as far as Great Cacapon, to protect that bridge, as he feared that some of the evil-disposed persons in that vacinity, in the absence of any protecting force, might destroy it. On the 2d of June, the first dispatch from General Miles was received as follows: "Colonel Campbell and command will re-occupy the railroad as before." That night found all the companies at their old posts.

From the 28th of May to the 12th of June, it rained almost incessantly. The Potomac became so much swollen that the water overflowd its banks. The flood accomplished what the rebels had failed to do, and carried away the railroad bridges at Great and Little Cacapon, on the 5th of June. These, however, were only temporary structures, and were soon replaced by more durable bridges.

From this time to September 11th, but little of interest occurred, except the movement to which we alluded in the opening of this article. The regular business of the railroad was resumed; the vast amount of tonnage passing over the road, day and night, clearly demonstrating the necessity of keeping this great thoroughfare open, as a military road alone, to say nothing of the vast accomodation which it afforded to the public at large.

After Stonewall Jackson and his forces had been driven from the Shenandoah valley, this section of the country became infested with numerous gangs of horse-thieves and guerillas. Horses were stolen indiscriminately from all parties. The thieves took them across the Potomac into Maryland and Pennsylvania, where they found a ready sale for them to Government contractors. Two hundred and seventy-three horses in all were taken from these thieves, as they attempted to cross the Potomac into Maryland. Many of them were returned to their lawful owners. All that were not claimed and proven were turned in at Harper's Ferry for the use of the Government.

The guerillas, also, became more troublesome, as they destroyed much private property, and were a great terror to the peaceful citizens. Many of the latter were seized and taken to Richmond. Frequent expeditions were sent out against them, and at various times parties and squads of them were captured. From the 1st of June to the 10th of September, the regiment captured in all two hundred and thirteen of these guerillas.

At six o'clock P. M., on the 11th of September, telegraphic communication was destroyed between Harper's Ferry and Sir John's Run west, the forces under General Stonewall Jackson having again reached the railroad at North Mountain station, seven miles west of Martinsburg, and two miles east of the limits of Colonel Campbell's department at Back Creek bridge, where Captain Long's company was stationed. Colonel Campbell being thus cut off from communication east with headquarters, and this time without any orders, he telegraphed west to General Kelley, stating the condition of affairs and asking for orders. On the 12th, General Kelly replied that he would not assume to give any orders, but would advise Colonel Campbell to fall back if the enemy advanced in superior force. Colonel Campbell, however, resolved to hold and defend the road as long as possible, and not to give it up unless assailed by an overwhelming force.

In assuming this responsibility, his only hope of success was to create the impression that he had a much larger force at each one of his ten posts than he really had upon the entire road. The undertaking was a most hazardous one, as he was without artillery or cavalry, with nothing but an infantry regiment to hold fifty-six miles of railroad, when there was not a Federal soldier in Virginia west of Harper's Ferry and east of the South Branch. But the importance of preserving the road, and the danger to the town of Cumberland, which would result from its abandonment, will be apparent to every one who will examine the map of Virginia. If Colonel Campbell had abandoned the road, the rebels would have had access to the entire country between Harper's Ferry and Cumberland. Romney was at that time already in their possession, and Cumberland would have fallen an easy prey, as General Kelly had no troops to protect that place.

Accordingly, on the 12th instead of abandoning the road, he took detachments from the three companies at Sir John's Run, Hancock, and Back Creek, and proceeded down the road, in open platform cars, past Back Creek, towards North Mountain, having previously sent ten men, under Major Linton, to the mountain to watch the movements of the enemy as they passed. After the main body of the rebels had passed, and their rear guard had come to North Mountain Station, Colonel Campbell, with his party of sixty-six men, attacked them vigorously, putting the whole rear guard to flight, killing two, wounding seven, and taking nineteen prisoners, with thirty stand of arms, and one artillery classon. So panic stricken were the rebels when this small party emerged from their hiding place in the woods, that they fled in all directions, supposing the attacking force to be much larger. Fearing to expose his weakness, the Colonel did not pursue the enemy far, but returned to the railroad with his prisoners, arms and caisson, and then proceeded to Sir John's Run.

On the next day he established a telegraph office near the bridge, so that he could communicate readily with Major Linton, at Back Creek. On the 19th, learning that the enemy's pickets were in sight at Back Creek, he proceeded down the road with two hundred men. From the position of the enemy's pickets they could see one side of Major Linton's camp at the bridge. The colonel, therefore, marched his two hundred men into camp on that side, passing them over the hill, out of sight of the enemy, and again back on to the road and through the camp. This was continued for two hours, and left the impression on the minds of the rebel pickets that the post had been stronly reinforced. The colonel then prepared three logs of wood, shaped like cannon, hollowed at the small end, and mounted them in a scientific manner upon the wooden breast-work during the night. Black gum blankets were sewed tightly around them, and at a little distance they presented the appearance of truely formidable siege guns. If the traveler, after leaving North Mountain Station, going west, and after he passes through the deep cut, will observe a high, rocky bluff on the right-hand side of the road, and just at the end of the bridge, he will see, upon the top of this bluff, which rises al-

most perpendicularly from the creek below, a rude-looking breast-work of logs and earth. If he can imagine three formidable-looking siege guns projecting over the breast work, he will have an idea of Colonel Campbell's Quaker fort.

Skirmishing with the enemy's pickets was kept up almost daily until about September 21. On that day Colonel Campbell learned that a large rebel force was approaching the bridge for the purpose of destroying it. Whereupon he sent his train to South Branch, with orders to bring down fifty men from each company, and to return to Back Creek with them (amounting to over five hundred men) by daylight on the 22d. The engine got out of order, however, and the train had only arrived at Cherry Run, three miles west of Back Creek, by 9 o'clock. In the meantime, the party at the bridge were attacked by two regiments of rebel infantry, two regiments of cavalry, and six pieces of infantry. Major Linton, seeing the overwhelming force of the enemy, fell back to Cherry Run, just as the reinforcements under Colonel Compbell arrived. The enemy fearing that they were being led into an ambuscade, hastily set fire to the bridge, and retired.

Our pickets were immediately thrown out to their old posts at Back Creek, while a stronger force than before was stationed at Cherry Run. On the 24th, Colonel Campbell telegraphed to General Wool, in command at Baltimore, for two companies of cavalry, which were greatly needed in order to obtain earlier intelligence of the movements of the enemy. General Wool replied, on the 26th, "If threatened by a greatly superior force, fall back on Cumberland," but said nothing about cavalry.

On the 26th our forces at Cherry Run saw a cavalry force on the tow path and road, on the Maryland side of the Potomac. They were stationing their pickets along the road and canal. Our men hailed them, and asked them what they were doing there. The answer was: "To watch you d—d secesh." Our men in vain endeavored to convince them that we were Federal soldiers. They declined invitations to come over and see for themselves, but finally they permitted one of Colonel Campbell's men to cross over, who succeeded in convincing them.

From the movements on the north side of the Potomac, Colonel Campbell became satisfied that the general commanding the army of the Potomac was under the impression that the rebels occupied the south side of the river as far west as to Sleepy Creek, as they actually were, indeed, at that time in strong force at Martinsburg and on the Opequan Creek, twelve miles east of Back Creek. He therefore immediately despatched his adjutant, Captain Wm. H. Rose, to General McClellan, with a letter, giving him a statement of the situation of affairs, and asking that the cavalry on the north side of the river might be transferred to the south side, which the General immediately ordered to be done, at the same time expressing his surprise at finding a regiment of infantry there. This was natural, as the main body of General Lee's army was then near Martinsburg.

On the morning of October 4, Captain Newhart's company, at Little Cacapon, twenty-two miles east of Cumberland, was attacked by Colonel Imboden, with seven companies of infantry and two of cavalry, numbering in all seven hundred men. Captain Newhart was completely surrounded and surprised; the first intimation they hae of the presence of the enemy being a volley fired from his own rifle-pits, upon his men, as they were at roll call. A dense fog prevailed at the time, and it was difficult to discern any object a few rods distant. The men ran for their arms, and endeavored to cut their way out. Only thirty-five succeeded; and the rest, fifty-two in number, including the captain and second lieutenant, were overpowered and captured. Our men fought bravely, but at a disadvantage. Two of the enemy were killed, and eight wounded. After setting fire to the bridge and water station, Colonel Imboden proceeded to Paw Paw, three miles east of Little Caeapon, and there captured Captain Hite's company. Colonel Campbell had no intimation of the presence of the enemy; but finding the telegraph communication cut off, he was on his way up the road to repair the wire, when, within five miles of Paw-Paw, he learned from an escaped soldier what had taken place. From other sources he learned that it was the intention of the rebels to attack Great Cacapon bridge, coming in by way of Bath.

Colonel Campbell accordingly concentrated his available force near Great Cacapon, on the hill overlooking Bath, but concealed by the woods. Here they awaited the enemy, the roads leading to Bath being in full view. The rebels approached within six miles of Bath, where they halted, and on the next day they retreated to Pughtown, twenty-seven miles from Bath. In the meantime, General McClellan, learning that a large rebel force was in this vicinity, ordered Colonel Campbell to concentrate his regiment at Hancock, in Maryland, on the north side of the Potomac. But the Colonel, knowing that the enemy had fallen back, took the responsibility to disobey the order, at the same time, sending a true statement of the situation to General McClellan.

On the 7th day of October General McClellan says in his report: "At this time General Averill, with the greater part of our efficient cavalry, was in the vicinity of Cumberland, and General Kelly, the commanding officer, had that day reported that a large force of the enemy was advancing on Colonel Campbell, at Sir John's River. This obliged me to order General Averill to proceed with his force to the support of Colonel Campbell." We have just seen, however, that Colonel Campbell did not need any support, and General Averill, with his four regiments of cavalry and six guns, was despatched in pursuit of the enery. He came up to the turnpike road, on the Maryland side, and had an interview with Colonel Campbell, at Hancock. The latter tried to induce him to cross at that point, and proceed through Bath to Romney; but the General declined doing so, and proceeded on to Cumberland, by way of the National road, in Maryland. He remained there till October 12, when he returned, by the same route, without crossing into Virginia.

On the 10th of October General Stewart crossed the Potomac just below Back Creek, with 1,500 rebel cavalry, making his celebrated raid into Pennsylvania. The signal corps on Fair View was captured by General Stewart, and the first information of his movements was telegraphed to General McClellan by Colonel Campbell. On the 16th of October a large force of the enemy made their appearance near North Mountain station, and began to tear up the railroad track, burning the cross-ties, heating and bending the rails, &c. General Newton, with three brigates, was sent up to drive those off. He arrived at Hancock October 19, and remained at a point opposite Cherry Run, until October 27, when he returned to Williamsport without crossing into Virginia. On the 13th of November, 1862, Colonel Campbell received orders from General Franklin to "concentrate his regiment at Hancock, or such other point as he might think best, if threatened by the enemy in force." But the Colonel did not find it necessary to use the discretionary power given him, but continued to guard the road as before. With discretionary power from all his superior officers, and under circumstances that would have justified him on several occasions in abandoning the road, he yet remained, performing his duty. During a greater part of the time even his locality was unknown to our army, as he was required to move day and night from one post to another, whenever threatened. It frequently became necessary to throw out his whole force as pickets, when he had, of course, no reserves to fall back upon. Completely deceiving the enemy in this manner, he has been successful in doing what few commanders would have undertaken.

On several occasions Colonel Campbell requested to be relieved from duty on the railroad, and sent into active service in the field. Serving on the railroad, he and his officers were almost out of the line of promotion; and conduct, however meritorious in itself, could scarcely be recognized or appreciated while the regiment was far from the observation of the General-in-chief.

A relation of the subsequent services of this galliant regiment must be deferred for another article. Doubtless there are many who will read of the acrievements of these brave Pennsylvania boys, who will desire, now that the war is over, to visit the scenes of their exploits, and this desire can very easily be gratified. A trip along the Baltimore and Ohio road, this summer, will well repay the tourist, for every mile of the route has become historic. Harper's Ferry, Point of Rocks, Capon Springs, Cherry Run, Hancock, Cumberland, Paw-Paw, and Grafton, are names now rendered illustrious for all time to come; and these, and other points along the line of the road, will continue to be objects of interest for many years.

Now that the war is over, too, the celebrated Berkely Springs, in Morgan county, Va., two miles from Sir John's Run, will again offer their attractions to the visitor. These springs are only five hours' ride from Baltimore, and the waters are noted for their remarkable remedial qualities. Tee hotel at the springs is now open, and is elegantly fitted up, and lighted with gas. It will be a favorable resort this summer, and will afford a convenient resting place for parties and families visiting the objects of interest along the road. Those who visit Berkely Springs for the first time this summer, and doubtless there will be many such, will be surprised at the romantic beauty of the spot, and the loveliness of the surrounding scenery. Cumberland, Grafton, and Harper's Ferry also afford excellent hotel accommodations; while Oakland, on the top of the Alleghenies, is one of the coolest and most quiet resorts of which we know, and is well provided for travelers in all respects.—*Phila. Press.*

## MONTANA MINING REGION.

The following statements of Captain Fisk, before the Travelers' Club of New York, present some interesting facts relative to the mineral wealth of Montana:

The mines of the Deer Lodge and its tributaries are in extent one hundred miles, and pay from ten to fifty dollars per day to the

man. Gulch diggings, in the vidinity of Bannack City, have a total length of thirty miles, and pay eight to forty dollars per day. Gulch diggings, in the vicinity of Virginia City, are in length eighthty-six miles, and pay ten to two hundred dollars per day to the hand. Prickly Pear and its tributaries pay from eight to one hundred dollars per day, and are in extent one hundred and forty-seven miles. Yellow Stone, lately opened near its source, in extent thirty-nine miles, pays ten to forty dollars per day. Here is a total of four hundred and two miles of placer or gulch diggings being wrought at this time with wonderful results. It is estimated that at least thirty millions dollars will be taken from the gulch-mines alone during the year from July 1st, 1865, to July 1st, 1866.

Many very thick an extensive quartz lodes of both gold and silver have also been lately opened by the increase of prospectors. These lodes crop out in all the mining districts, and many of them have already proved highly productive, such as the Dakoto, Wadhams, and others of the gold, with the Rothschild, Nonpareil, Henry Clay, and a number of other silver lodes, which have given great results by assays made at the United States office here and at other points, ranging from three hundred dollars to two thousand five hundred dollars per ton.

## PETROLEUM.

The following are the receipts and exports of petroleum from the city of New York. The operations of several years seem now to demonstrate the following principles:

1. That petroleum, whatever may be its source, is like coal, iron, lead and gold, a natural element in the earth which may be relied on *as existing somewhere.*

2. That, like other similar elements, it is uncertain till discovered where or in what quantities it exists

3. That, as in the case of gold, it must be, till a well is in full operation, quite uncertain as to profitable results:

| | Barrels. |
|---|---|
| Receipts of petroleum since January 1st, | |
| 1865 | 243,714 |
| 1864 | 358,131 |
| 1865 (exports) | 104,026 |
| 1864 " | 207.497 |

A Harvest of Gold.—The following is the official report of all the American gold received at the United States mint and its branches, from our first gold discoveries down to June 30, 1864:

| | |
|---|---|
| California | $556,718,873 11 |
| Colorado | 9,783,071 23 |
| North Carolina | 6,121,397 03 |
| Georgia | 6,906,375 27 |
| Oregon | 6,142,433 84 |
| Idaho | 2,308,385 07 |
| Virginia | 1,558,874 41 |
| South Carolina | 1,352,969 44 |
| Alabama | 198,330 08 |
| Tennessee | 81,406 75 |
| Utah | 78,509 14 |
| Nevada | 66,208 42 |
| New Mexico | 63,023 53 |
| Washington | 38,799 55 |
| Arizona | 29,650 84 |
| Vermont | 298 00 |
| Dakotah | 7,858 88 |
| Other sources | 202,773 97 |
| Total | $597,187,734 21 |

## MONETARY AND COMMERCIAL.

The market for loans is reported easy at 6 to 8 per cent., the demand being light and currency in full supply; there being but little speculative demand, and general business, although active, is conducted mostly on a cash basis, our merchants are abundantly supplied with their own capital. In New York, the *Tribune* says, "the money market continues easy. For call loans the rate is 6 per cent. as the general rule, with exceptional loans at 5@7. In commercial paper no change. The bank statement shows a large decline in deposits and legal tenders, but it has no effect upon loans at call. There is good inquiry for undoubted mercantile notes and acceptances. Favorite signatures are passed in the street at seven and eight per cent., while single named paper and the lower grades are negotiated at higher rates, to a moderate extent only."

The condition of the market for exchange has not varied during the week; the leading quotations are as follows:

| | Buying. | Selling. |
|---|---|---|
| New York | par.@50 prem. | 50@1-10 prem. |
| Philadelphia | par.@50 prem. | 50@1-10 prem. |
| Bostan | par.@50 prem. | 50@1-10 prem. |
| Baltimore | 1-10 dis. | par. |
| Gold | 142½@143 | 143 |
| Silver | 128@131 | 132@133 |

There is a disposition to get up a speculative movement in breadstuffs, on the theory of the injury to the ungathered and unhoused crops, combined with the unfavorable reports from Europe. The weather during July has been the most remarkable ever known, having been as fickle as April, great injury has undoubtedly been done to a large portion of the hay, oat, wheat and barley crops, over a larger portion of the West and Northwest, which will seriously injure the quality, as well as tend to reduce the quantity of the present harvest, as farmers are much less careful in gathering a poor article than in that which is of a superior quality.

The New York stock market is firm, and government are higher. The *Tribune* says: "The share market was strong but not active, except for Erie. Reading and Illinois Central. Erie shares are becoming scarcer in spite of its large capital, and the foreign demand makes the daily deliveries more difficult. As high as 86 was paid for the stock, which closed at 85⅝. Reading, upon its large traffic, was strong. Illinois Central sold at 128 in the morning, and at 131 at the public call. The remainder or the market was neglected. Later in the day the market was lower, with the Exception of Erie, which closed strong. The closing quotations were: New York Central, 93¾; Erie, 85⅝; Hudson, 108½; Cleveland and Pittshurgh, 67¾; Rock Island, 106½; Fort Wayne, 97¾"

The Erie with its enormous capital, it seems is being absorbed into the hands of parties who design to hold it. It has been fully demonstrated in railroad experience that long lines of road, to be profitably managed, must have a begining as well as an ending, and that it must not be cut up into sections with conflicting interests, and that one head must direct the whole. The operations of the market in reference to the Erie appears to point to the fact that the managers and owners of the Atlantic & Great Western have discovered that they have but one end, and that they are absorbing the Erie for the purpose of obtaining another. If they succeed in this, they will have a wonderful advantage over the other grert lines leading to the East, and will have the game in their own hands.

Earnings of the Chicago and Alton Railroad for the second week in July:

| | |
|---|---|
| 1865 | $79,778 00 |
| 1864 | 55,971 00 |
| Increase | $23,807 00 |

The receipts on the Grand Trunk Railway for the week ending July 16 were:

| | |
|---|---|
| 1865 | $115,000 00 |
| 1864 | 113,927 00 |
| Increase | $1,073 00 |

The following were the total imports at New York for the week ending July 22:

| | 1863. | 1864. | 1865. |
|---|---|---|---|
| Dry Goods | $1,845 589 | $1,486 091 | $3,366 859 |
| Gen. Merchandise | 1,623,733 | 1.959,775 | 2,839 604 |
| Total for the week | $3.469 322 | $3.445.866 | $6,206,463 |
| Prev. reported | 96,453 789 | 136,801,907 | 85.994,186 |
| Since January 1 | $99,923,111 | $140,247,773 | $92,200,649 |

The Ohio and Mississippi road earned from January 1 to June 30, six month, in

| | |
|---|---|
| 1864 | $1,507,705 |
| 1865 | 1,779,183 |
| Increase | $171,478 |

The Hudson River Railroad earned in

| | |
|---|---|
| June, 1864 | $253,049 |
| June, 1865 | 310,049 |
| Increase | $57,000 |

Railway from St. Paul to St. Louis.—An important meeting was held at St. Louis on the 23d ult., upon the subject of connecting St. Louis with St. Paul by rail. This result (a distance of 680 miles) is to be effected by building 150 miles of road from the southern terminus of the Minnesota Central near Cedar Falls, on the Iowa-Minnesota line to the terminus of the North Missouri on the Iowa-Missouri line. The latter, it is said, will be completed to the southern line of Iowa in a few months The Minnesota Central is rapidly pushing its way southward, and will reach the northern line of Iowa whenever Iowa is ready to give it paying connections.

The subject was presented to the merchants of St. Louis by delegates from seven central counties of Iowa, on the route of the proposed connection between Minnesota and Missouri. They represent that a company has been organized to build this counection, and have subscribed land and money enough to grade and tie the road, and they want St. Louis to pay half the expense of the iron and rolling stock to equip it. The subject was favorably received.—*Western Railroad Gazette.*

Central Railroad of Georgia.—We learn that this company have completed a contract with Messrs. Spratt & Callahan for re-building forty-six miles of their road, from Savannah to station 4½, on the Little Ogeechee river. The work will commence just as soon as tools and the requisite materials can be brought here. It is believed the contract will be completed inside of 39 days. The contractors are efficient, enterprising men, and will push the work to the full extent of their ability. This will be a great step towards the reopening of railroad communications, and the company deserve credit for hastening the improvement. Mr. Wm B. Johnson, of Macon, has been elected President of the Board of Directors. The Superintendent is Mr. Geo. W. Adams.—*Savannah Herald, June* 21.

# COUPON AND LOCAL TICKETS!

## CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

**CONSECUTIVELY NUMBERED**

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD.


## GOVERNMENT TRANSPORTATION.

GENERAL ORDERS No. 17.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., March 16, 1865.

1st. For the purpose of producing uniformity in the Transportation service and guarding against abuses, blank books of Transportation Orders will hereafter be issued from this office to the Chief Quartermaster of each Department, to be by him immediately furnished to each officer under his order entitled to issue the same; after the receip of which no other form will be used, unless in emergencies when the prescribed blank form cannot be had, and then the reason for not using it must be stated in the order.

These blank orders will be numbered and registered in this office in such manner that there will never be two orders of the same number in circulation; they will be charged to the Chief Quartermaster to whom sent, who will in like manner charge and hold responsible his subordinate officers.

On exchange of posts, or on transfer to another officer, like receipts must be taken and forwarded to the Chief Quartermaster of each Department.

2d. Within five days after the end of each month, a concise report will be made to the Department Quartermaster of the number of orders issued, the number cancelled by error (which must accompany the report), and the number remaining on hand, with a statement of the amount of transportation furnished in the month; which report in a condensed form (accompanied by the orders so cancelled) will be by him immediately transmitted to the Quartermaster-General, under envelope, endorsed on margin "Rail and River Transportation."

3d. The marginal register should contain the substance of the order issued, and will be preserved by the officer issuing for his own protection, or return to the Department Quartermaster or this office, as may be hereafter required.

*Care should be taken at all times to keep on hand a sufficient supply of these blank orders*, which can be obtained upon application to the proper Senior or Department Quartermaster.

4th. Unless in extraordinary circumstances, all rail and river transportation, passenger and freight, at any post, will hereafter be under the control and management of a single officer, on whom requisitions will be made by other officers requiring transportation.

5th. When more than five persons, in one party, are to be transported over one road, or a continuous line of roads, separate orders for transportation must be issued for each road to be passed over. These orders should be received on the train instead of tickets, and are to be receipted by the party named in the order, and given up on the cars—the officers, or persons in charge, filling the receipt with the number actually carried. Five persons, or a less number, may be carried over a continuous line of roads upon a single order for transportation, and this order may be exchanged at the starting-point for tickets over the entire route.

6th. Settlement should not be made nor vouchers given to railroads on orders for passenger transportation properly belonging to other roads, but the *passenger* accounts for each road should be made up separately in the name of the roads to which they belong.

7th. Appletons' Railway Guide for January, 1865, will be used as a standard for indicating routes and fixing distances, unless the actual distance is proved to be less, in which case settlement will be made on the basis of actual distance. Where this Guide cannot be more readily procured it can be furnished from this office.

8th. When a number of troops are to be transported from any point to any other point, on the same day or train, it should be done in squads as far as practicable. A single transportation order, or set of orders, should be given to the ranking officer, or most responsible person of the several detachments.

9th. Blank books of Free Transportation Orders will also be furnished, to be used on boats belonging to, or in the service of, the Quartermaster's Department, or on railroads operated by the Government. The free passes in these books will be given to persons entitled to receive Government transportation, and should not be issued without designating on the order the boat or road on or over which the person is to be transported. The marginal registers in these books will also be preserved for return to the Department Quartermaster, or to this office, as may from time to time be required.

Should the route to be traveled be in part over roads or on those owned by private parties or companies, care should be taken that Free and Pay Orders are given as the case may require, or such requisitions furnished as will enable the party entitled to transportation to procure it at points where pay transportation commences.

10th. To warrant the granting of transportation, except in cases specified by Regulations or General Orders, published for general information, the person demanding the same should show a requisition or order from competent authority requiring the movement by public conveyance in the performance of public duty.

The original requisition, when not necessarily required by the officer presenting it, should be retained by the officer furnishing the transportation; in other cases, a certified copy or necessary extract from the order should be furnished to, and preserved by, the officer granting transportation as his proper authority therefor, and a certified copy of the same must be endorsed on the back of the order.

11th. When the cost of transportation is to be reimbursed to the Government, as in the case of sick and furloughed soldiers, the required certificate should not only be made upon the furlough or order, but the transportation order should also be endorsed on the back substantially as follow: "The within transportation, furnished under General Order ——, and the proper officers duly notified. —— ——
A. Q. M."

12th. When transportation is granted to persons not in the military service, full explanations therefor should be given

13th. Orders for transportation should give the name of the party to be transported, or if there are several, then of the officer or person in charge, and state the number of men to be transported.

Orders for "one man," "ten men," and the like, without designating any name, are improper

14th. The receipts for transportation should be filled up in ink by the officer or person named in the order before signing, and if he cannot write his name, there should be a witness to his mark.

Names and places should be written distinctly in full, and not abbreviated.

15th. Duplicates of orders for passenger transportation should not be issued.

16th. When a requisition calls for transportation to any given point and return, the order should be issued to the place of destination, and the return transportation should be obtained at that point, provided it can there be procured.

17th. Upon the form of order now issued should be prosecuted all the facts necessary to enable an auditing officer to decide as to the regularity or propriety of the order, so that it may be paid by any authorized disbursing officer.

18th. Erasures, interlineations, or alterations, if made against the interest of the Government, should be explained on the order by the issuing or other competent officer; otherwise, the transportation should only be settled for in accordance with the order before change or modification.

19th. Transportation by water being generally the cheapest should be selected when consistent with the interests of the service. All transportation should be furnished by the shortest practicable route, unless a different route is indicated in the order which directs the movement. Where there are two or more competing routes without material difference in distance or time, the business should be divided in equitable proportion between them, the distance for which compensation is made being estimated by the shortest practicable route.

20th. In no case is subsistence furnished by the Quartermaster's Department.

21st. The good of the service requiring that railroads should obey the requisitions of officers properly authorized to demand transportation, in case compensation is made by the Government for illegal or unauthorized transportation so required, the officer making the requisition or issuing the order will be charged therewith, or if not paid by the Government, the railroad will be entitled to recourse upon such officer.

By order of the Quartermaster-General.

LEWIS B. PARSONS.
*Colonel, and Chief of Rail and River Transportation.*


## The Old And Reliable Route.

**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAIL ROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent.
my11 Pittsburg, Pa.

## Change of Time, Sunday, June 18th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:00 A. M., and 10:30 P. M.
Arrive at Cincinnati.....7:30 A. M., and 7: 0 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

## *STEAMSHIP COMPANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS, between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | | |
|---|---|---|
| WASHINGTON | 3,204 tuns, | 900 horse-power. |
| LAFAYETTE | 3,204 tuns, | 900 horse-power. |
| EUROPE | 3,251 tuns, | 900 horse power. |
| FRANCE | (afloat). | 900 horse power. |
| NAPOLEON III | (afloat), | 11,60 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its exuivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel): at Havre, WILLIAM ISELIN & Co. 640*

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building) | 3,412 | ——— |
| ENGLAND (now building) | 3,430 | ——— |
| SCOTLAND (now building) | 3,430 | ——— |
| ERIN | 3,310 | Grace. |
| HELVETIA | 3,315 | Prowse. |
| PENNSYLVANIA | 2,872 | Grogan. |
| VIRGINIA | 2,872 | Lewis. |
| LOUISIANA | 2,166 | Axplett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to
WILLIAMS & GUION, No. 71 Wall street.

For steerage passage apply to
640* WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN | $80 00 | STEERAGE | $30 00 |
| First Cabin to London | 95 00 | Steerage to London | 34 00 |
| First Cabin to Paris | 105 00 | Steerage to Paris | 40 00 |
| First Cabin to Hamburg | 100 00 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR ..... 2,595 65-95 tuns.
WILLIAM R. BELL . ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge.

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroc & Co.

For freight or passage apply to
640* JAMES A. RAYNOR, No. 10 Barclay street.

## CENTRAL RAILROAD
—OF—
## NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Eas on with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:30 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a.m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:15; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m.; 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a.m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p.m. train.

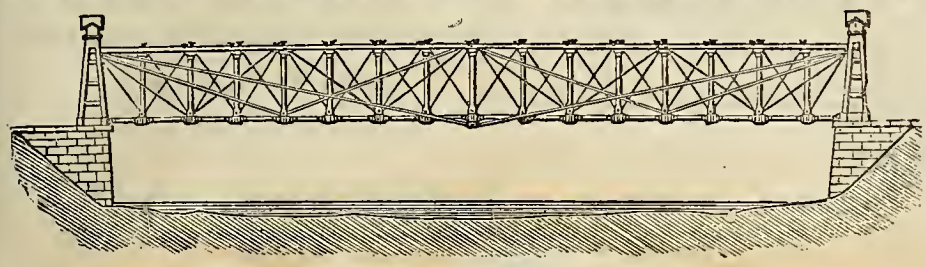
JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m., and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*

FINK'S PATENT

# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 30 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '53. 1y. Letter Box, 1392. C. J. SCHULTZ, Pittsburgh, Pa.

HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Sash Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27,1y

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

N. W. BALDWIN, MATTHEW BAIRD.

M. W. BALDWIN & CO.

ENGINEERS,

BROAD AND HAMILTON ST.

*Philadelphia, Pa.*

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or not of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive El-

419 y 1

KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS.

PHILADELPHIA.

JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

BUSH & LOBDELL,

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS

Either Single or Double Plate,

With or Without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

MACHINE SHOP

SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

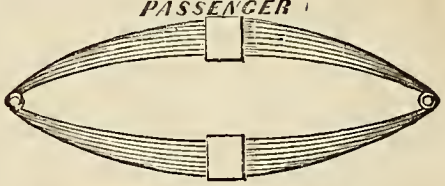
RAILWAY SPRINGS.

FREIGHT

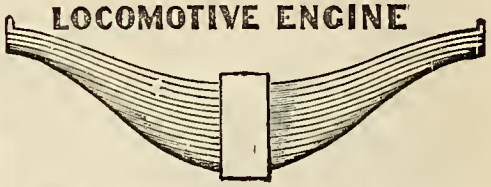




PASSENGER



LOCOMOTIVE ENGINE



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

ELLIPTIC AND SEMI-ELLIPTIC

SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

All Springs tested to double their usual load.

PHILP S JUSTICE,

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

No. 47 West Front St., CINCINNATI

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

W. M. F. HEWSON,

STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commisson only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great natinnal thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and the

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT.

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH, *Master Transportation, Baltimor*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## Ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A. M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A. M. |
| do do | | 6 15 A. M. |

☞Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Shuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St, Louis and Cairo Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairn Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P. M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M. & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad. foot of Main street.

C. E FOLLETT,
General Ticket Agent.

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD. President.
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

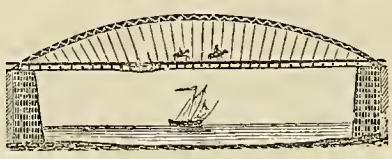
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

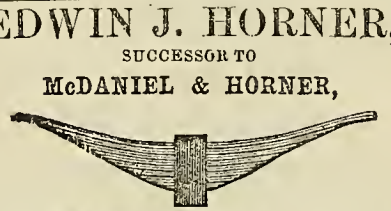
Snt. 2. MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**

## FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11.30 P. M. night.

On Sundays, 4.30 A. M.; 11.30 P. M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10. 4 P. M (Express.

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West

WM. EARNS SUPT

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, AUGUST 3, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| *Atlantic & Great Western—* | | |
| | 9:00 A. M. | 7:30 P. M |
| | 10:30 P. M. | 7:30 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond, Chicago and Indianapolis | 7:00 A. M. | 9:45 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:50 P. M. |
| Richmond and Chicago | 7:00 P. M. | 11:25 A. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | 7:00 A. M. | 8:05 A. M. |
| Dayton Accommodation | 2:20 P. M. | 9:45 P. M. |
| Eastern Night Express | 10:40 P. M. | 7:55 A. M |
| *Indianapolis & Cincinnati—* | | |
| Chicago and St. Louis Express | 7:00 A. M. | 12:00 P. M. |
| Springfield and St. Joe Express | 1:00 P. M. | 5:00 P. M. |
| St. Louis and Chicago Express | 4:00 P. M. | 2:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 4:50 P. M. | 8:35 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:40 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 7:00 A. M. | 9:45 P. M. |
| Connersville, Cambridge City & Indianapolis Express | 3.30 P. M. | 12:50 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P, M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 7:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 8.00 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 6:00 A. M. |
| Evening Express | 2:35 P. M. | 10:12 P. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapoli & Cincinnati Roads, are run by Vincennes me which is 12 minutes slower than Cincinnati time.

## PROGRESS OF RAILROADS IN THE NORTH WEST.

In our columns from time to time, we give notices of the new enterprises in railroading and of the extension and improvement of old lines; by which it is very evident that the same spirit of railroad development which was recently so active in Ohio, Indiana and Illinois, is now equally active on both banks of the Mississippi. In Wisconsin, Iowa, Minnesota, Missouri, Kansas and Nebraska, railroads are extending in every direction. The main object, of course, is to connect the lakes, rivers and cities of those distant States with the great central lines which traverse Ohio, New York, Pennsylvania and Maryland; that the great centers of commerce and production may be united; and the movable columns of merchandise, products and passengers be carried to their destined ports and marts. Some estimate of this progress may be made by inspecting the table of "Appeltons' Guide," which gives a fair view of all the *complete* lines of railways;—that is, those in operation. The whole length of miles of railroad in operation in the Central and North Western States are as follows :

| | Miles. |
|---|---|
| In Ohio | 3,168 |
| In Indiana | 1,741 |
| In Illinois | 3,030 |
| In Michigan | 661 |
| In Wisconsin | 927 |
| In Minnesota | 49½ |
| In Iowa | 762 |
| In Missouri | 831 |
| In Kansas | 30 |
| Aggregate | 11,589½ |

In Ohio there is 1 mile of railroad to 13 square miles of surface; in Indiana 1 in 22; in Illinois, 1 in 20; in Michigan, 1 in 70; in Wisconsin, 1 in 70; in Missouri, 1 in 75, and in Iowa, 1 in 80. In Ohio and Indiana, the proportion of railroads to the surface is very large. In these States the *ratios* stand very nearly as follows :

| | |
|---|---|
| Surface | 78,000 sqr. miles. |
| Population | 3,800,000 |
| Miles of railroad | 4,770 |
| 1 mile of railroad to | 17 sqr. miles. |
| 1 mile of railroad to each | 800 inhabi'nts. |

If the same proportion to the surface existed in the States, east of the Mississippi, there would be 65,000 miles of railroad in those; and in all probability such will be the fact. Such great States as Kentucky, Tennessee, Alabama, Mississippi, Michigan and Wisconsin, must, in a few years, have several thousands of railroad more than they now have. The sparseness of population and four years of war have arrested the progress of railroads in the West; but it will soon re-commence, and the construction of railroads will, in these States, require a large amount of capital and labor. West of the Mississippi river and in the Pacific States, railroading has re-commenced with great vigor. From all the leading points on the Mississippi, roads have already been carried a considerable distance to the interior. From St. Paul, Winona, Dubuque, Quincy, Davenport, St. Louis and Cairo, roads destined to be hereafter great highways to the Rocky Mountains, are steadily progressing. As we advance over the great plains, the route of the Pacific roads will be found much easier than we supposed; and in a large part of that region the land and facilities of living will be found much better than is commonly supposed. It is a mistake to suppose that any large tracts of the earth are entirely barren. The great plains or slopes of the mountains are not arid by any means. They have supported millions of buffalo for ages; and, except in small districts, they have water enough. The great want of the plains is *wood*; but how long will it take to have plantations of forest trees? Twenty years is simply sufficient to supply the whole country with timber; and, in the meantime, there are immense coal beds at accessible distances. Population will therefore fill up even "*the plains;*" and already villages are springing up along the Platte; and as the military posts secure perfect protection, immigration will rapidly come in.

We happen to have before us an account of the valley of the Platte river, written several years since, by a missionary; and as we are casting our eye over the great western plains, and seeming to see it fill up with people, and because interested with railroads, we will add his description :

"Up to Fort Kearney the soil of the valley is good, and nothing to prevent a profitable settlement save the want of lumber. Platte river is spread out over a space of about a mile in width, shallow and rapid, wholly unfit for navigation, except as it has afforded to some of the Pike's Peakers a transit, at its present high stage, in light-made crafts, hastily conrtructed, frequently requiring to be hauled off from the shoals, and occasionally drowning a luckless passenger in some unexpected depth, washed out by its rapid current. But let none henceforth pronounce the Great Platte a 'wortheless stream,' as many have done, and the writer among them; but he takes it all back and would fain apologize to the noble river. God has made nothing in vain. No man who has once followed up its windings, traversed the beautiful natural highway opened up its valley, equal to one of our Eastern turnpikes, linking together the two halves of our continent, and drank of its sweet and wholesome waters, a constant supply for the whole route, can call it *useless.* This river, with its two branches, probably affords on its banks more continuous miles of good natural highway than any other stream in the known world, thus indicating, from the hand of Providence, a route for the great railroad connection with the Pacific, whenever our National Legislature shall find time to attend to a matter of *so small concern.* The monotony of the scenery for some hundreds of miles

is greatly relieved by the thousands of beautiful islands that crowd its bosom, covered with timber of varying size and character, but generally small. Considerable cedar is found, but neither in dimensions nor quantity for railroad construction, as has been alleged. From these islands fuel is obtained by emigrants, scarcely any being found upon the mainland. Occasionally a good spring of water is met with, and still more rarely a running brook. Water is easily obtained by digging a few feet, and in many places it abounds in sloughs."

## ANNUAL REPORT OF THE OHIO & MISSISSIPPI RAILROAD.

Though we have given some results of this road, it is only now we have received the report of the eastern division, which was made on the 31st of March. The statements, we confess, surprise us very much; and for some unknown reason the managers think it best to give no explanations. As the road is principally owned by a few gentlemen in New York, it certainly concerns them more than the public; but we have rarely seen a railroad report from which we could learn so little.

The financial statement of the western division is thus given:

The statement of the expenses was furnished by Wm. Newhouse, late auditor of the western division.

| | |
|---|---|
| The earnings show a total for— | |
| Passengers | $720,688 27 |
| Freight | 581,066 38 |
| Express | 35,231 01 |
| Mail | 28,098 50 |
| Total | $1,365,084 16 |
| For the expenses a total sum of | 1,234,658 70 |
| Net receipts | $130,425 46 |
| or 8 per cent. | |
| Expenses | 92 per cent. |

It appears from another table that the repairs to *permanent* work and the *iron* come to $450,000, so that the actual expenses were $785,000; or 6 per cent., but even this is very high.

On the Eastern Division (Cincinnati to Vincennes):

| | |
|---|---|
| Total earnings | $1,945,986 |
| Total expenses | 1,656,949 |
| Leaving a net balance | $289,037 |

This is 15 per cent. of the receipts, and certainly a more favorable statement than the other: but not very satisfactory to those who hope the road will, at some time, pay dividends. The following statement is given of the causes of increased expenditures;

"The gross expenses appear very large. The actual expenses for the year are entitled to a credit for the extraordinary expenses, which are included in the total sum belonging to the business of former years, and extra expenditures in 1864, which deducted show the current expenses for the year to be this sum, $1,434,287 34, viz:

| | |
|---|---|
| Account of 1862 and 1863: | |
| Settled in 1864, and charged this account | $83,530 68 |
| New wharf boat on Wabash river at Vincennes | 2,260 00 |
| Lot of wire cable | 1,930 00 |
| New machinery for shops | 3,128 00 |
| Rebuilding bridges, Nos. 4, 5, 34, 37, 61, and 65 superstructure | 107,670 15 |
| Masonry in piers and abutments | 7,800 10 |
| Splices, track bolts, and other track materials, to make the track permanent | 16,340 75 |
| | $222,659 68 |

But with this deduction the expenses will appear large, in comparison with the amount of earnings, which, however, is satisfactorily accounted for. The earnings have been advanced in rates, an average of about 30 per cent., while, for the same period, the expenses have been increased in the cost of labor, an average of about 50 per cent., and in the cost of materials, an average of about 90 per cent. and, in addition to the increased cost of labor and materials, a very considerable increase was made to the force employed on the road, and in the shops, in putting the road and rolling power in good and substantial condition; probably more complete in all their appointments, than they have ever been before."

The aggregate receipts and expenses of both divisions are as follows:

| | |
|---|---|
| Receipts | $3,311,070 |
| Expenses | 2,991,603 |
| Net | $319,467 |

This is rather a poor show for the expenditures of twenty millions of money. We saw in New York the sale of the certificates of the company at 28 cents on the dollar; which looked quite surprising; but is as explained by this report. The surprising part of the report is that the *business* of the road has increased, and is increasing; and is quite large enough to give handsome profits. What is the real difficulty at the bottom of its affairs? The following is an interesting table:

PASSENGERS.

*Number of passengers carried over the entire line.*

| | Total. | Carried 1 mile. |
|---|---|---|
| To and from other roads and through | 174,801 | 29,819,789 |
| Local between stations | 315,275 | 14,720,315 |
| | 490,076 | 44,540,104 |

| | | |
|---|---|---|
| Average rate per pass'r through, E. D. | | $6 72 |
| " " " | local | " ... 1 64 |
| " " " | per mile | " ... 2 71 |

FREIGHT.

| | |
|---|---|
| Number of tons carried eastward | 106 006 |
| " " " westward | 84,790 |
| Total | 190,796 |
| Number of tons carried one mile | 28,277,655 |
| Gross earnings for the year | $820,308 38 |
| Rate per ton per mile | 2 90 |

## COAL SUPPLY OF GREAT BRITAIN.

The following article, though not referring to our own country—where coal is inexhaustible for thousands of years,—is yet one of great interest. In addition to what is said below, is not the simple fact, that the English are digging coal more than 2,000 feet below the surface significant of the greater fact, that coal can not be worked many years longer with commercial profit? Why go so deep? If this must be done, can coal be much longer profitable, *in competition with the United States, both for coal and manufactures?*

Probable Exhaustion of British Coal Mines—How Depth Increases Cost.—More than three-quarters of a century ago, the alarm was first given that the coal-fields of Great Britain were gradually but surely approaching exhaustion, and from that time to the present, writers of greater or less eminence have reiterated the warning. Comparatively little notice, however, was taken of their forebodings until the autumn of 1863, when the subject was prominently brought before the public by Sir William Armstrong, in his inaugural address to the British Association, held that year in Newcastle, the birth-place of the coal trade. In the year 1789, John Williams, Mineral Surveyor, published a work entitled "The Natural History of the Mineral Kingdom," in which one chapter was devoted to the consideration of the "limited quantity of coal in Britain." Fully appreciating the value of coal, he was filled with apprehension when he thought of the consequences of its failure, and, in the absence of correct data upon which to ground his calculations—for in those days no statistics had been collected, and no geological map had been thought of, he came to the conclusion that the exhaustion of the coal-beds was an event much nearer than it is now conceived to be. Sir John Sinclair and Robert Bald, in the beginning of the present century, directed their attention to the same subject, and argued that, inasmuch as, on the one hand, the extent of our coal store was fixed and limited, and, on the other, our consumption of an ever-growing character, the period must some time be reached when the former would be overtaken by the latter "Even if the Grampian Mountains," said Bald, "were composed of coal, we would ultimately bring down their summits, and make them level with the vales." In later years Dr. Buckland prominently and earnestly brought this subject before the public, both in his evidence before the Parliamentary Committees of 1830 and 1835, in his celebrated Bridgwater Treatise, and in his address to the Geological Society in 1841. John Holland, in his "History and Description of Fossil Fuel," explains very distinctly the general bearing of the question, although he does not go into numerical details. He says:

"While it is manifestly inconclusive to estimate according to the present demand the consumption of coal for centuries to come, and still more so to assign any specific condition of society to such a remote period, we are warranted in the first place in assuming that the demand for this species of fuel will not diminish but increase with every imaginable condition of the progress of society; and, secondly, we have before us the undoubted fact that our mines are not inexhaustible. In addition to this, there is the most direct evidence to show how far some of the most

valuable beds in the northern coal fields have been worked out already; at the same time that tolerably satisfactory calculations have been made as to the quantity remaining unwrought."

Mr. T. Sopwith, in an essay on the "National Importance of Preserving Mining Records," (quoted in the English Cyclopædia, article, Coal Trade,) makes the following remarks:

"The opinion that our stores of coal are all but inexhaustible, rests wholly on the assumed data, and not upon an accurate and detailed statistical account, such as alone would warrant a confident opinion. This question will, ere long become a subject of serious concern, unless some measures are taken to found our calculations on a solid basis. It is an easy matter to assume that a considerable thickness of available coal extends over hundreds of square miles, but the different opinions formed by men of the highest respectability and talent strongly prove how meagre and unsatisfactory are the only data on which these estimates are founded. It is not, however, the mere quantity of coal that is to be considered. Especial regard must be had to its quality, depth, thickness, extent, and position. Many of the inferior seams can only be worked in conjunction with those which, by their superior quality, repay the expense of working them at depths varying from 300 to 600 yards; and it may readily be conceived that inferior coal only could not be profitably raised from pits equal in depth three or four times the height of St. Paul's Cathedral, unless the price of such inferior coal was raised to more than the present price of the best coal. It is not the exhaustion of the mines, but the period at which they can be profitably worked, that merits earnest and immediate attention."

The progress of the Geological Survey, and the establishment of a Mining Record Office, as suggested by Mr. Sopwith, have placed the question upon a new footing; and when in 1860 public attention was drawn to the subject by the warm debates on the French treaty, Mr. Hull, of the Geological Survey, devoted much time and labor to the study of the question, and the following table embodies his view of the general condition of our coal fields:

| Coal group. | Area in sq. miles. | Coal contents. Millions of tons. | Produce in 1861. Tons. | Number of Collieries in '61. |
|---|---|---|---|---|
| Scotch | 1,920 | 25,300 | 11,081,000 | 424 |
| Newcastle | 1,845 | 24,000 | 34,636,884 | 849 |
| Lancashire, &c. | 535 | 7,594 | 25,643,000 | 1,158 |
| Staffordshire, &c. | 1,004 | 26,560 | 18,201,796 | 516 |
| South Wales | 25 | 90 | 1,255,644 | 28 |
| Cumberland | | | | |
| Total | 5,419 | 83,544 | 86,817,324 | 2,794 |

Mr. Hull also made a comparison between the total supply of coal within the kingdom and the total probable demand, and after estimating that, at the then rate of consumption, our coal fields would be exhausted in 1,100 years, he remarks: "Yet we have no right to assume that such will be the actual duration, for the history of coal mining during the last half century has been one of rapid advance." Our consumption, in short, has about doubled itself since 1840; and, supposing it to continue doubling every twenty years, the "total available supply would be exhausted before 2034." Sir William Armstrong, in his inaugural address to the British Association in 1833, says:

"By combining the known thickness of the various workable seams of coal, and computing the area of the surface under which they lie, it is easy to arrive at the estimate of the total quantity comprised in our coal-bearing strata. Assuming four thousand feet as the greatest depth at which it will ever be possible to carry on mining operations, and rejecting all seams of less than two feet in thickness, the entire quantity of available coal existing in these islands has been calculated to amount to about eighty thousand millions of tons, which, at the present rate of consumption, would be exhausted in nine hundred and thirty years: but, with a continued yearly increase of two millions and three-quarters of tons, would only last two hundred and twelve years. It is clear that, long before complete exhaustion takes place, England will have ceased to be a coal producing country on an extensive scale. Other countries, *and especially the United States of America*, which possess coal fields thirty-seven times more extensive than ours, will then be working more accessible beds at a smaller cost, and will be able to displace the English coal from every market. The question is, not how long our coal will endure before absolute exhaustion is effected, but how long will those particular coal seams last which yield coal of a quality and at a price to enable this country to maintain her present supremacy in manufacturing industry. So far as this particular district is concerned, it is generally admitted that two hundred years will be sufficient to exhaust the principal seams even at the present rate of working. If the production should continue to increase as it is now doing, the duration of those seams will not reach half that period. How the case may stand in other coal mining districts I have not the means of ascertaining; but as the best and most accessible coal will always be worked in preference to any other, I fear the same rapid exhaustion of our most valuable seams is everywhere taking place."

To this important subject our attention is now again directed by Mr. Jevons, lecturer to the Owen's college, Manchester, who, having devoted many years to the inquiry, reports his conclusions in a masterly and exhaustive treatise. In his opening chapter he cites the opinions expressed by the several writers referred to above, and adopts Mr. Hull's estimates. He then turns to the geological aspect of the question, and shows the way in which an estimate of the existing coal is made, and the degree of certainty attaching to it. In a chapter on coal mining, he deals with the question of the depth to which we can follow seams of coal. He admits that there is no precise physical limit to deep mining, although he thinks a depth of four or five thousand feet is the utmost limit to which the extraction of coal can be beneficially carried on, and he argues that the growing difficulties of management and extraction of coal in a very deep mine must greatly enhance its price, and that it is by this rise of price that gradual exhaustion will be manifested. This naturally leads to the inquiry whether there are yet in the cost of coal any present signs of exhaustion. *He refers to the fact that the price of the best quality of Newcastle coal has been more than doubled within three-quarters of a century, and this he attributes to the increased depth of the collieries.* In treating of the inventions in regard to the use of coal, Mr. Jevons shows that "we owe almost all arts to Continental nations except those great arts which have been called into use here by the cheapness and excellence of our coal," and that "the constant tendency of discovery is to render coal a more and more efficient agent, while there is no probability that when our coal is used up any more powerful substitute will be forthcoming." "Nor," says he, "can the economical use of coal reduce its consumption. On the contrary, by rendering its employment more profitable, the present demand for coal is increased, and the advantage is more strongly thrown upon the side of those who will in the future have cheapest supplies." The hope that we may, when our own coal is exhausted, draw our supplies from foreign countries, Mr. Jevons considers delusive. In fact he holds out no prospect but the *ultimate decadence of our power and greatness as a nation in consequence of the exhaustion of our coal*, and the only remedy he suggests is—not restriction in the get, nor taxes on the export, nor enactments to prevent waste of coal—but the payment of the national debt by the appropriation of the legacy and succession duties to that purpose, so that when our mineral treasures are gone, and our industrial resources are crippled, posterity may find in comparative freedom from burdensome taxation some compensation for the increased price of coal—"the worst of taxes."

We conclude our present notice of Mr. Jevons' work with the confession that it has not driven us to despair. According to Mr. Jevons' estimate, several generations must pass away before the people of this country actually experience a scarcity of coal, and we cherish the hope that before that time arrives either some substitute for coal will be discovered, or the consumption of that article will be proportionately if not absolutely diminished.—*London Colliery Guardian, May 27.*

---

Atchison and Pike's Peak Railway.—Under the late reorganization of the Atchison and Pike's Peak Railroad Company, embracing Wm. Osborn of New York city, as contractor, the company is allowed to place a first mortgage lien on the road as fast as completed, and to use the money therefrom for contracting other portions of the work. The new organization has the following officers: General S. C. Pomeroy, President; Willis Gaylord, Vice President; James Wadsworth, Secretary and Acting Treasurer; Chauncy Vibbard, Chairman of the Executive Committee; O. B. Gunn, Chief Engineer; and Judge Bonney and J. E. Williams, President Metropolitan Bank, New York city, Trustees of Bonds. The company has issued its bonds to the amount of $1,600,000, and Mr. Wheeler, an English gentlemen, in connection with Chauncy Vibbard, are the agents for their sale. They are to be sold abroad. It is the determination of the company to push the road with energy. — *Atchison Champion, June 2.*

## JOURNAL OF RAILROAD LAW.

CONSTRUCTION OF RAILROADS.—DAMAGE TO HIGHWAY.—MEASURE OF DAMAGES.

The case of the inhabitants of Veazie against The Penobscot Railroad Company, very lately decided by the Supreme Court of Maine, contains some interesting points as to the liability of companies for negligent injury to a highway in the construction of the road. The action was to recover damages against the company for constructing their railroad across a highway which the plaintiffs are bound to keep in repair, in such a manner as to render such way unsafe and dangerous for travelers thereon.

The first ground of damages is, the amount which the town has been compelled to pay to one Phillips, and the cost and expense of defending a suit instituted by him against the plaintiffs, as primarily liable for the injuries caused by the defect. The second ground of damages is, the injury sustained by the town by the digging down, and the cost of repairs of she highway.

The opinion of the court was drawn up by KENT, J.—The defendants insist, in the first place, that whatever was done was done in pursuance of their legal right by their charter §8 and by C. 81, §8, of R. S. of 1841.

By the provisions of those Acts, the railroad corporation had an unquestioned right to have their road pass over or under the highway; and for that purpose to raise or lower any part of it. But both by those statutes and by the principles of the common law, the defendants were bound to exercise that right so as not unnecessarily to injure others. Corporations as well as individuals are bound to observe that excellent and compact rule, which has for centuries stood as the guardian and protector of individuals. against the reckless, tyrannical, or careless exercise of admitted rights. When applied to a case like this, it requires that the act permitted should be done in such a manner thas the use of the road should not be unnecessarily obstructed, and that reasonable care should be used by the erection of barriers, and otherwise to warn and protect the citizens from danger and injury. The right to make the cut did not give the right to do it without due regard to the public safety; and that required that all proper guards should be erected and continued whenever there was danger or injury to any person by reason of the cut. The charge in this case is, that the corporation made a deep cut partly across the road, which was not well guarded by sufficient railing against accident; and that one Phillips, traveling on the road in the evening, using due care, walked, or fell, into the hole or cut so made, and was injured. These allegations, if legally established, bring the case within the rule before stated, and it is not necessary to decide whether the provisions of the Act of 1853, (R. S. of 1857, C. 51, §15,) are applicable to this case. Under that Act, if the crossing had been made without the consent and action of the county commissioners, or city authorities, as therein set forth, it would have been a nuisance, and of course, an illegal and unjustifiable act. We have considered this point on the assumption that the act of cutting was legal. Lowell *vs.* Boston and Lowell Railroad, 23 Pick., 24; Drew *vs.* New River Co., 6 Carr. & P., 754.

It is further objected that this company is not liable for damages consequent upon the acts or neglects of the person who had contracted with the corporation to do the work) It is condended that the contract is a legal one, and only authorized a legal act; and that, if the contractors performed this legal act in an illegal manner, the company is not responsible. This point, it would seem, must have been raised and determined when this case was before the court, at a former tetm on a statement of evidence offered. The fact that this work was done by contractors, was distinctly stated in that report; and the Court by ordering the case to stand for trial, notwithstanding that fact necessarily determined, that it did not debar the plaintiffs from maintaining this suit.

We are not disposed to discuss at length the questions which have arisen in different courts in England and in this country, in relation to the limits of the liability of individuals who have contracted with others to do certain work, and by the negligence or fault of such contractors during the progress of the work, injuries have arisen to others. The case on this subject are collected and commented upon very ably by Mr. Justice Thomas, in the case of Hilliard *vs.* Richardson, 3 Gray, 349. When applied to cases between individuals, not involving any question of public right, the rule, that if the injury occurred in the ordinary course of doing the work, and as part of it, the employer may be liable, but if from some irregularity of the contractor outside of his contract, he alone is responsible, may perhaps be the true and just one, where the relation is simply that of a contractor who is to perform his work without any interference or control, or direction by the party employing him. Where such right to direct or control exists, or where the relation is that of master or servant, a different and opposite rule may be enforced.

In the case before us, the company stipulate that the work is to be done "according to the plans and directions of the chief engineer of said compady," who is "to be employed and paid by the company." See Wyman *vs.* Pen. & Ken. Railroad Company, 46 Maine, 162.

But we place the decision on this point on the well settled doctrine, that where the Legislature, as guardian of the rights of the public in a highway, permits a corporation or individual to use or interfere with the way, and to obstruct its use on condition, express or implied, that all requisite care is to be taken to protect others from injury, the right thus granted must be exercised by the party to whom it is granted, and can not be assigned, so as to relieve the party from the faithful exection of the power. The company may doubtless make contracts for the performance of the work; but can not avoid their obligation to protect the public against danger by the stipulations they may make. The grant of the Legislature is to a knowu and responsible company as it is to be presumed, over which the Legislature has more or less controll. Important rights are to be affected, and it would be a dangerous as well as an unsound doctrine, to allow such a body to transfer their liabilities and obligations to the public and the individual citizens, to irresponsible or transient contractors. In the execution of such a trust or power, the company must be responsible whatever contracts they may make. Hilliard *vs.* Richardson, 3 Gray, 349, Bailey *vs.* Mayor, &c., New York, 3 Hill, 531.

It is settled by various decisions, that where railroads have the power to cut through and alter highways, and in so doing travelers sustain an injury without fault on their part, by reason of an illegal defect, the towns in which the highways are situated are primarily liable for such injuries. Irate *vs.* Gorham, 37 Maine, 451; Willard *vs.* Newbury, 22 Vt., 458; Currier *vs.* Lowell, 16, Pick., 170.

A town thus made liable may sustain an action for indemnity against the railway company, if that company was first and principally in fault, and the wrongful cause of the defect or neglect. The town is compelled by law and public policy to stand as guarantors, or in a position like that of surety for the company, that it shall not be guilty of neglect. When the wrong or neglect is altogether on the part of the company, the town may nevertheless be held to make good the injury to the individual. The liability of the railroad company is to indemnify the town fully for all the damages it has been compelled to pay, and for the costs and expenses reasonably and fairly incurred. Lowell *vs.* B. & L. R. R. Co., 23 Pick., before cited; Duxbury *vs.* Vermont Central Railroad, 26 Vt., 751; Hayden *vs.* Cahot, 17 Mass., 169.

The Judge in this case ruled that the evidence put in was sufficient to authorize a verdict for plaintiffs, and was conclusive upon the defendants as to the cause of the injury to said Phillips, and as to the extent of the damage. The principal point thus raised, is whether the judgement recovered by Phillips against the town, with the parol evidence, is conclusive upon defendants as to the cause and extent of the damage. The rule seems to be established, that when a person is responsible over to another, either by operation of law or by express contract, and be is notified of the pendhncy of the suit, and requested to take upon himself the defence, he is not afterwards to be regarded as a stranger to the judgement that may be recovered; because he has a right to appear and make as full a defence as if he were a party to the record. Coates *vs.* Roberts, 4 Rawle, 100. A judgment after such notice will be conclusive against him, whether he appearhd or not; Jackson *vs.* Marsh, 5 Wend., 44; Thrasher, 2 N. H., 433.

It must be made to appear that the action is for a cause for which the defendant is liable. We think it does sufficiently appear in this case, that the injury sustained by Phillips for which he sued, was occasioned by the acts or neglects of the railroad company. The declaration in the writ Phillips *vs.* Veazie, sets out suhstantially, the same defects in the same place in the highway as the writ in this case, viz.—a cut partly across or into the highway, which was not well guarded by sufficient railing. The plaintiffs also introduced parol proof that the locus of the injury to Phillips was where the railroad, as located, crossed the highway, and that the cut was there made by the corporation or its agents.

The two declarations are identical. There is no cause for the injury set out in the first declaration which is not found in the one before us. With the connecting parol evidence, the idenfity of the cause of action upon which the recovery was had, with that in this case, is sufficiently established.

The defendants contend that they did not have sufficient notice of the pendency of the former suit and therefore are not concluced by it. The notice was given to the president, and to Mr. Wilson, a counsellor of this Court, and a director of the company, on the day before the trial commenced, and Mr. Wilson was present at the trial, and took notes, but no part in the trial. The notice certainly gave but little time for preparation. But the town, so far as it appears, had made all necessary preparations, and the cause was fully and fairly tried. If the company had desired fur-

ther time for preparation, they should have moved the Court for a continuance, or have notified the town that they desired more time, or in some manner signified a wish for postponement. The fact that a director attended and took notes is important, and shows that that officer of the company had an opportunity to know how the trial was conducted.

The notice requested the company to assume the defence. If they had desired to do so, there was time sufficient to notify the town of that fact, before, or during the trial. No such notice was given, or desire expressed. We think they can not now avoid their liability on this ground.

The defendants interpose the objection that both the claims sued for are barred by the limitation contained in §11, of C. 81, R. S. of 1841.

That limitation of actions to "one year after the causing of such abstruction," obviously refers to the right of action given in the preceding section, and is restricted to such actions as a brought by the town to recover damages done to the road itself, or for the amount expended by the town in putting the way in good repair after neglect of the corporation so to do. This construction covers the claim in this case, "for the repairs of the cut and road." The action not having commenced within one year after the obstruction and these expenditures, the limitation applies, and the plaintiffs can not recover for this item.

The other claim is not for an injury to or expenditures upon the road, but to recover damages from the railroad corporation for which the town was held liable, primarily, by a judgment of the Court. The town could not legally commence the action until the damages to the individual had been ascertained and fixed in some mode, and the plaintiffs held liable therefor. In the 11th section before referred to, the limitation is to one year after the obstruction is caused or ereated. But if an injury to an individual should happen by reason of such obstruction more than a year after its first creation, the right of action for such injury against the town or corporation, would not be barred by this limitation of the statute. In this case, the action was commenced within a year after the liability of the town was ascertained and fixed. The right of action then first accrued, and the plaintiffs may recover for this item.

Judgment for plaintiffs for the amount paid to Phillips on his judgment against plaintiffs with interest thereon, to time of final judgment in this case; also for reasonable charges for counsel fees, witness, and expenses in defending said suit of Phillips, and interest thereon as above.

---

THE STATE DEBT OF MISSOURI. — The following is Governor Fletcher's official announcement of the adoption of the ordinance for the payment of the railroad and State indebtedness of Missouri, by which boudholders will see that the ordinance has become a part of the organic law of the State:

"I, Thomas C. Fletcher, Governor of the State of Missouri, in pursuance of authority in me vested by said ordinance, do by this my proclamation, make known, that upon an accurate casting up of said above mentioned returns, there appeared thirty-nine thousand and sixty seven votes for: 'Shall the railroads pay their bonds? Yes,' and twenty thousand nine hundred votes for: "Shall the railroads pay their bonds? No.'"

## COMMISSIONERS' REPORT ON FLAX COTTON.

From the Department of Agriculture at Washington, we have been favored with a copy of the report of the commissioners appointed under the act of Congress, Feb. 25th, 1863, appropriating $20,000 for investigation, to test the practibability of cultivating and preparing flax or hemp as a substitute for cotton. The result is a pamphlet of nearly one hundred pages, comprising much valuable information. Contributions of fibres and of the products prepared for them were received by the commissioners from several parties engaged in the production of these materials, which specimens are now preserved in the Agricultural Museum. Such as promised the best results were critically examined and experimented upon, and their adaptation to the machinery of our manufactories fully tested. The fact was ascertained at the commencement of investigations that with the various improvements in modern machinery, an unlimited amount of flax straw may be cheaply adapted to the use of the manufacturers of course linens, and may also be prepared for combination with wood in a large class of fabrics in the preparation of which it had already been introduced.

The commissioners state that they "have continued the research to a point where the most flattering results appear ready to open."

The report before us opens with an allusion to the history of flax culture in the United States and in Europe, following up the subject with liberal quotations from foreign cyclopædias. Flax is not regarded as an exhausting crop. It thrives in a great variety of soils. Kentucky and Missouri are the two leading States where the crop has always been of considerable importance. Of late, since the suspension of the demand for bagging and bale rope, the fibra has been largely worked into tow, and shipped to Eastern and European manufactories. The commissioners devote much space to inquiries concerning the treating of flax straw by machinery; also to the chemical preparation of the fibres. We extract as follows:

A leading object of the appropriation having been to test the practicability of substituting the fibres of flax for cotton, on cotton machinery, and also of mixing them instead of cotton with wood, we have directed our attention particularly to such modes of assimilating these fibres to cotton as would, in our judgment, be likely to accomplish the desired results, and to such modificacions of cotton machinery (wool machinery not requiring any change) as would best adapt it to the production of yarn from such assimilated fibres. There are very few mills of this kind in the United States, and most of these are using long-line for course fabrics, obtained to a considerable extent in the Canadas, whence it is impofted free of duty under the reciprocity treaty. A member of this commission recently visited one one of these mills at Braintree, Massachusetts, and was shown the various machines and processes for making coarse, long line yarn and cloth, It is well knewn that the only mill of this class in our country fully equipped for spinning and weaving fine lone-line yarns (located at Fall River, Massachusett,) was, after a great outlay of capital and immense exertions to operate at a profit, converted into a cotton mill at a heavy loss, in consequence of an inffficient home supply, ihe mill being precluded from using foreign stock by a practically interdictive duty. After the most careful consideration of various modes of growing and treating flax to obtain the best results to the farmer, and an abundant supply to the manufacturer, we are of the opinion that the crop should he planted mainly for the seed, and incidentally for the fibre.

Conclusions have been reached both in regard to the most promising modes of using flax cotton prepared exclusively by mechanical means for the manufacture of coarse goods, and by combined mechanical and chemical means for the manufacture of fine goods on cotton machinery.

"Foremost among the cotton mills that have been altered to make valuable fabrics, are the Hope and Penn Mills, of Pittsburg, Pennsylvania, owned by James H. Childs, Esq., and others. The best flax grain bags in the country are made at these mills, and at the same mills are also made very superior stocks for battings, and for the use of upholsterers. The mills at Lockport, New York, owned by ex-Governor Hunt and others, are also producing excellent brown and bleached stock for uphostery, waddings, and coarse yarns, as well as twine of a very high grade. The Medina Flax Company's Works, at Medina, New York, are likewise producing goods of a similar character of superior quality. To this list must be added the mills of Governor Smith and others, in Warwick, Rhode Island, that are making grain bags of excellent quality, beside carpet warps, twine and rugs. There are many other successful pioneers in this branch of flax manufacture obtaining the most encouraging results, so that this department of substituting flax for cotton on cotton machinery may be considered no longer problematical, but a success."

After extensive observation, the commissioners say it is wholly impracticable to disintegrate flax into its ultimate fibre or cells without the intervention of a solvent for the intercellulose or gluten.

"Specimens of bleached and unbleached flax-cotton, hemp-cotton, asclepias-cotton and China grass-cotton, have been sent by divers persons to the commission, some of them very nicely disintegrated; but three only of all the contributors who have responded to our call have accompanied their specimens with any explanation of the mode of cottonizing, viz: Mr. H. McFarlane, of Rocky Hill, New Jersey, who uses the Claussen process; Mr. Hugh Burgess, of Beyer's Ford, Pennsylvania, and Messrs. Fuller & Upham, of Claremont, New Hampshire. Mr. Burgess had not experimented so extensively as the latter gentlemen, but the specimens of both are well disintegrated and separated, or cottonized. The contributions of Mr. Burges were cottonized from flax of unretted, tangled straw dressed on Mallory & Sandford's 12 roller brack, in the presence of two of the commission, and also of the flax of unretted straw."

In relation to the comparative durability of fabrics made from flax and cotton, the opinion is expressed that the former must not only be stronger when new, but more reliable for service. Upon this particular branch of the subject the report concludes as follows:

"The preparation of flax-cotton is not yet sufficiently developed to enable us to predict decidedly its ultimate success. If more time be given this commission, or a new one, for further investigation, greater progress will undoubtedly he made in the present year than has been accomplished during the entire period that has been given to the subject.

"Under every aspect of the subject, we believe it will be safe to alter one or more fine cotton mills (that are now idle) to give this stock a trial if the same can be purchased at

encouraging prices; at first mixed with thirty-three per cent. of cotton, and if successful, to gradually reduce the per ecutage of cotton untill by continued success they may be enabled to withdraw entirely the admixture and thereby demonstrate to the countrd the practicability of spinniug fine flax cotton yarn on cotton machinery.

"The encouraging reports from those who have used machiue broken and disintegrated flax cotton as a substitute for au admixture of cotton in coarse woolen goods, relieve the commission from the necessity of elaborating this branch of the subject. As an admixture in fine woolen goods, in the forming of chemically disintegrated fibre, there are at present no satisfactory results. The failure to obtain such results in this direction is propably owing more to the want of a supply of good material and to the generai unwillingless of manufacturers of fine woolens to mix even cotton with wool, than to any intrinsic want of adaptahility of flax cotton for admixture. On the contrary, the peculiar affinity of flax for color (it being equal to wool in this respect,) and its indisposition to excessive fulling, would seem to make it a much more desirable admixture for fine colored woolen goods than cotton. And it is not unreasonable to expect that when there is a sufficiency of supply of well disintegrated and separated refined flax cotton, that it will he extensively sold for this purpose."

Snbsequent pages in the report are devoted to an examination of specimens of fibre before the commission, including a reference to the reports of the juries of the International Exhihition at London. The list of tropical plants is particularly noticeable, imparting a new interest to this class of exotics. "China grass" receives special attention :

"The commissioners were very much pleased with specimens of this material contribnted by Lemuel W. Wright, from Brooklyn, New York, which are remarkable for the beauty. They consist of the raw material, and of combed and clean fibres, some of which are beautifully dyed. There was alss a portion of tangled fibres, or tow, which was exaunined by the microscope, though not presented as flax cotton. The fibres of this matcrial are made up of very long cells, which would be ruptured in any attempts to cottonize it, and it should bc used as long line. The specimens of cloth presented in which this fibre was combined with wool were very beautiful."

The history of this plant, since its introduction into this country from the West Indies, and propagation at the Congressional Gardens, was at once invcstigated. It has been widely distrihuted through the Southern States. Specimens of an allied spccies, received from St. Anthony, Minnesota, are said to demonstrate that we have "a native plant of great value." Mr. Squire's book upon tropical fibres alio affords matcrial for much interesting speculation. The commissioners' report cn flax cotton is replete with information, and must conduce, in a large measure, to the success of those objects which prompted the investigation.—*Journal of Commerce.*

## READING RAILROAD.

The following exposition of a coal road shows a wonderful demonstration of the capaeity of railroads to carry *heavy* freights profitably:

This road and branches is the great outlet from the Schuylkill coal regions of Pennslvania. The number of miles operated during last year was 686. The number of locomotives in nse was 216, and the aggregate of all the cars 14,986. In the transportation of coal, the ton is estimated at 2240 pounds. The tons of coal transported last year were 3,065,577; merchandise, at 2000 pounds to the ton, 807,106. The uumber of tons of coal transported over the road, since its commencement in 1843, is 35,825,360. The gross receipts were $9,269,340, of which $909,881 camc from passengers; from freight on merchandisc, $953,776; and from freight on coal, $7,203,775. The transportation expenscs were $7,878,027, leaving a balance 3,147,992. A dividend of 15 per cent. was declared, amounting to $2,618,129. The stock of the company consists of preferred, $1,551,800; common, $15,902,394. The honds of the compauy amount to $6,675,300.

The transportation of coal, which is the extraordinary feature of this road, presents the following results :

| Years. | Coal, tons. | Coal, freight. | Gross ear'ngs |
|---|---|---|---|
| 1843..... | 218,711 | $278,840 | $394,318 |
| 1844..... | 421,985 | 445,509 | 597,613 |
| 1845..... | 814,279 | 886,939 | 1,000,381 |
| 1846.....1,188,258 | | 1,600,667 | 1,889,714 |
| 1847.....1,360,681 | | 1,698,664 | 2,000,945 |
| 1848..... .....1,235,044 | | 1,386,605 | 1,692,556 |
| 1849.....1,097,762 | | 1,648,900 | 1,933,590 |
| 1850..... .....1,351,507 | | 2,071,631 | 2,360,786 |
| 1851. .....1,650,270 | | 2,018,871 | 2,294,975 |
| 1852 .....1,650,912 | | 2,150,677 | 2,480,626 |
| 1853.....1,582,248 | | 2,254,694 | 2,688,288 |
| 1854.....1,987,854 | | 3 253,823 | 3,781,640 |
| 1855.....2,213,292 | | 3,664,095 | 4,291,898 |
| 1856.....2,088,903 | | 3,242,458 | 3,879,584 |
| 1857.....1,709,692 | | 2,412.923 | 3,065,521 |
| 1858.....1.642,646 | | 1,865,693 | 2,510,750 |
| 1859.....1,632,932 | | 1,883,685 | 2,724,293 |
| 1860.....1,946,195 | | 2,328,158 | 3,312,546 |
| 1861.....1,639,535 | | 2,111,023 | 2,905,839 |
| 1862.....2,310,991 | | 2,879,419 | 3,911,830 |
| 1863.....3,065,261 | | 4,897,200 | 6,252,902 |
| 1864.....3,065,577 | | 7,203,775 | 9,269,341 |

## LIABILITY OF RAILWAYS AS CARRIERS OF PASSENGERS.

The proposition that a railroad company is bound to carry every passenger who presents himself, is perhaps somewhat too large. Although there are some cases which go to the length of affirming this proposition, it must he taken with exceptions. There may be reasonable objections to the proposed passenger. He must be in a fit state of sobriety, health and conduct, so as not to be obnoxious to other passengers. But although the company is not bound to carry a person who is diseased to an extent to be dangerous, or who is drunk or insane, or persons of notoriously bad repute or character, they can not expel him, after having received his fare and admitted him as a passenger, unless he is guilty during the journey of some flagrant impropriety of conduct. (Compton *vs.* Braithwaite, 8 Jnr., 875; Pendergast *vs* Compton, 8 C. and P., 45.) In like manner, if the passenger was a pickpocket, or belonged to the swell mob, he could not he expelled so long as he was not guilty of any impropriety after the journey commenced; but a passenger is bound to submit to all reasonable regulations weich are adopted for the convenience, comfort, and safety of the passengers. And as passengers are bound to obey the orders and regulations of the company, unless they are oppressive or grossly unreasonable, whoever goes on hoard a train, under ordinary circumstances, impliedly contracts to obey sneh regulatians, and may justly be refused a passage if he willfully resists or violates them. (Story on Bailment, Sec. 591.)

The refusal may be upon the ground of inabilty to carry.

But Chief-Justice Redfield remarks that it must be an extreme case, to justify an absolute refusal to carry a passenger, since it could scarcely be supposed ever to occur that a railway, in any sense properly equipped, for the purpose of carrying passengers and freight, should not be able to meet all emergencias in some way.

But it is said in an English case, where the company had issued an excursion-ticket, stipulating to run trains in a given mode, that they could not excuse themselves by showing the carriages were all filled. The learned Judge said: "They should have made it a condition of their contract that they would not carry unless there was room." (8 Eng. L. and Eq. R., 362 )

### CARRIAGES AND STATIONS MUST BE SAFE.

Railway companies, in addition to warranting their carriages being in a safe and fit condition for the journey, ae also liable for the consequence of permitting the road-bed or rails and ties to be in an unsafe condition for the purpose of travel; thus where a tie was broken, or a rail split, or a bridge broken down and a passenger was injured, the judge will leave it to the jury to say whether the tie or rail or bridge had been laid or constructed and maintained with sufficient skill and care, and of reasonable, proper strength and good timber, having regard to the purposes for which it was made.

They must also manage and light their several stations and depots with proper case, and are liable if any accident happen to a passenger from neglect of his duty. But in order to make them liable, it must be shown that they have left their premises in such a state as to be likely to endanger the safety of others. (Martin *vs* Great Northern Railroad Company, and see 27 Law of C. P., 39.)—*Railway Times.*

[From California Farmer.]

## THE SONOMA VALLEY RAILROAD.

Some three years since in our visits from San Rafael to Petaluma, Sonoma, Napa, Healdsburg and Santa Rosa, we could not but then realize the very great advantage that must result to the whole of this country by the building of a railroad that would open up this most fertile section, and bring their products speedily and with little cost to this market.

From that time to the present we have not lost sight of this most important internal improvement, and when we consider the agricultural wealth of that section, we have been surprised that the citizens of these districts have not acted long before this, and had the "iron horse" speeding from valley to valley with frigbtened trains of the farmer's and stock-raiser's wealth.

We have seen, as is nsually the case, that as soon as the truth becomes fixed that a railroad *must* be built, there are always some *outside capitalists* who stand ready to pitch in and try to build and control all such thoroughfares without the least regard to the wants or the permanent interests of the people.

As in all other places so in the Sonoma Valley, the moment the people themselves begin to move then comes parties ready to try and take the *biyest half* of the loaf. We judge this by the tone of the *Santa Rosa Democrat*, from which we copy an editorial on the subject, which, although brief, states unmistakable facts. The people of this section are fully able to build, equip, manage and control the road themselves, and not permit any outsider to hold a check-rain over their prosperity by

dictating to them as owners of a railroad through their own land, how much freight they shall pay for their produce, or how much to ride in the cars across their own country.

One of the most fatal evils to the prosperity of any section of a country is *outside* influences. If the farmers and stockmen, the merchants and mechanics of this valley own the road, they will always aim to manage it for the best interest of the whole country, but hear what the editor of the *Democrat* says:

"This important project will, we trust, not be suffered to slumber much longer, as railroad communication from Petaluma to Healdsburg is a vital necessity to future growth and prosperity of our now flourishing county, and it behooves our citizens to take such action as will secure the advantages of the same at as early a day as practicable.

"It seems to us highly important that this road, when constructed, should be owned and controlled by our own citizens, in order that the tariff may not be placed at such an exorbitant figure as to seriously impair the usefulness of the line for the transportation of the agricultural products of this section.

"That the road will be a paying investment for capital, none, we think, will deny, nor the fact that our citizens are amply able to build a first-class road from Petaluma to Healdsburg without calling for assistance outside of the county."

In addition to these sensible remarks, we copy a letter from a well known and highly esteemed gentlemen, a resident of the valley, and a person so thoroughly conversant with railroad matters and so early devoted to the best interest of his own county, that we would take his "ipse dixit" at any time, and we sincerely hope his counsel will be received as it deserves, and his knowledge and aid invoked, for it will be a success beyond all question, and the opening of the *Sonoma County Railroad* would add more than a million of dollars value to the wealth of the taxable property of the county at once.

RAILROAD CAMP, April 13, 1865.

*Editor Sonoma County Democrat:*—I noticed in one of your papers a proposition eminating from S. S. Brooks & Co., of San Francisco, to the effect that if the people of Sonoma county would denote one hundred thousand dollars or take stock, which is an equivalent, and guarantee them the right of way, they would build a first-class railroad from Petaluma to Healdsburgh. I have waited patiently to see the result of that proposition; but I notice in your paper of the 9th instant, an article extracted from the Mendocino *Democrat*, which, I think, will suffice to give such information as the people need, and cause them to abandon the proposition and its supporters.

I unhesitatingly state, that if the people will act as they should, the enterprise can be carried through to a state of completion, in a manner that will reflect credit both upon the county and themselves. But as for the above proposition, I know, if the same was acceded to, thas with its results it would recoil upon the inhabitants of the county in such a manner that the road and its colleagues would be a burden to the people of the county, instead of a benefit.

As I stated while in your county, the only and proper way to build the road is for the inhabitants along the line, or at Petaluma, Santa Rosa, and Healdsburg, to raise a sufficient amount to defray the expenses of a survey, so that they can see the line of the road, and the cost of its construction. Then, if deemed necessary, place the road under contract, and each and every one to do what may be in his power to encourage the progress of the work. Also, let the county come in as a stockholder, which will insure the completion of the road in such a manner that all parties concerned will be satisfied with the result.

So far as I am concerned, I do not wish the contract, but I feel anxious to see the enterprise started and completed. I know there are some in your section that are by nature opposed to public improvements; but their acts should not effect the result. Let those who feel an interest in the enterprise take the matter in hand and raise, say, two thousand dollars, and I will guarantee to give five hundred more, or enough to defray the expenses of a survey. So soon as I am informed that you are ready to have the survey commenced, I will immediately make the arrangements, so as a party of engineers will at once commence operations.

Yours, Respectfully,
J. R. MEYERS.

[From California Farmer.]

## SAN FRANCISCO IN 1890.

Imperial Rome, in her palmiest days, never excelled the grandeur of the *San Francisco* that is to be in the future. Every year bears evidence of progress in each department of art, science and literature.

Our streets and thoroughfares are being widened, old buildings removed to give place to better and more stately structures; railroads in our streets; the fire telegraph; our public buildings, churches, school houses, court houses, etc., everything marks progress.

The yield of our mines will soon be fabulous, while our valleys and hillsides will roll in their abundant products, that shall load ships to every part of the world, and bring back to our shores the treasures and works of art from every clime.

No one can go to the suburbs of our extending city, and not feel that she is *stretching her arms into the sea*, to enlarge her borders, while over the hills, palaces and gardens rise rapidly, giving certain indications of future wealth and greatness. *Twenty five years hence*, those that now reside here, and shall then live to see our city, will think of *Imperial Rome.*

Let reflecting men see the buddings of the coming day; art unions, libraries, picture galleries, gardens and villas will grace and beautify every portion of this, the then mighty emporium of the Pacific. One million, two millions, of people, with wealth untold, wharves and docks where lay steamers and clipper ships from all parts of the world, bringing hither the richest fabrics and the most costly goods, to a people who will lavishly pour out wealth to enjoy them.

In that day, a voyage to Europe and round the world, will be but a trip of a month or so, and a visit to New York and back, will be a pleasant tour of a couple of weeks, upon the *double track* Pacific Railroad. These are but a faint picture, the reality will more than surpass it, for San Francisco has a bright and glorious destiny.

The literature of the Pacific coast is the talisman that shall tell whether we deserve true riches or not.

The riches of our *mines*, however great, the abundance of our harvests, however valuable, together with the genius of our mechanics and artisans, may all be placed in one scale; these, unless we have a sound literature, a pure religion, and a well educated people that will overbalance all these, we are poor indeed.

One of the best means for educating the people is public libraries of well selected books, and fortunate indeed is it for our city that we have some noble ones, yet we want more.

We want a FREE PUBLIC LIBRARY, where the hard working man, the mechanic and day-laborer, whose scanty means barely gives support to a large family, can obtain a book "without money and without price." A free public library would prove a blessing to our city. Who among our rich men will move in the matter? All honor to those who lay the foundation stones for such a monument.

## ON THE SILVER DISCOVERIES IN COLORADO.

Mr. Merrick came down from the silver mines yesterday. He informs us that people are still flocking thither, and that parties are going to work in earnest to demonstrate the nature and quality of their veins. The blacksmith shop has been put in operation, and the extension of the one horse grocery is doing a thriving business. We remember well in 1858, toward Fall, meeting in Kansas a returned party of Cherry Creek explorers; they were lank and hungry, ragged, rusty and discouraged. The hot sands of Cherry Creek had absorbed the moisture of their soles (pun), and with it their dreams of a new El Dorado near Pike's Peak. They exhibited a small quantity of gold dust, and "allowed" there was *some* gold in the section about the headwaters of the South Platte, but not enough to justify the seeking it. How disappointed those men would be, could they be suddenly transported hither now! The best of mines have been here discovered, the wilderness wrested from nature and the savage, flourishing towns built, and the foundations of a golden State laid deep and sure. Even so it may prove with regard to the supposed silver discoveries of McClellan Mountain. There are many who believe in them, and it is that strong faith alone which discovers and develops in advance of the known and palpable. To it we owe the final dissipation of the impression, once so prevalent, that the "Great American Desert," as it was laid down on the old maps, was a succession of arid wastes and shifting sands, *sans* water, *sans* timber, *sans* fertility, *sans* everything but worthlessness and boundlessness. To perpetrate the sacrilege of a parody on Milton, it was men of this faith, amounting almost to an instinct, who tempted with wandering feet the burnt, untraveled, infinite expanse, and through the palpable obscure found out their uncouth way. It is well to have such; well also to remember that as but few of the thousands upon thousands who have come to Colorado now own a claim on the Bobtail, or Gregory, or Gunnell, so but few of the thousands visiting Silver Mountain can possibly strike it rich, and that unflagging industry and steadiness constitute the only royal road to fortune after all. It is striking as well as amusing, however, after all that has been said about Colorado's being a grand bumbug, to see people returning to Colorado from almost every direction and distance, and pronouncing new mining regions, ditto. It is as much as to say that Colorado has passed through the chrysalis humbug state common to all newly discovered El Dorados. We hope the silver mines will prove a reality, notwithstanding our expressed opinion to the contrary, which was honestly made up on the evidence of our senses. According to all late experience, these senses are becoming utterly

untrustworthy, and we find ourself doubting the correctness of their finding. They have served us so like those do which always inform their possessors that everything new is nonsense, that we sincerely hope they may have been at fault with regard to the silver discoveries, and confess to a slight fear that they have been.—*Col. Mining Journal, July 4.*

The same paper contains the following:

"A man who came down from Leavenworth Mountain yesterday met fifty men on the trail above Georgetown, bound for the silver mines. On Clear Creek they were too numerous to count, and it was given up. There *is* a very grand prospect from the top of the mountain. One can see a hundred miles in every direction—from the southwestern rim of the South Park and Pike's Peak, to the western rim of the Middle Park and Long's Peak, and across forty miles width of mountains down into the valley for a hundred miles, where it supports the horizon, a dim, spiritual line. The view is worth the trip. We never saw anything half so grand. It was almost terrible. We seemed to be on the battlefield of the elements, either of which, in the exercise of its vast and inexorable strength is so terrifying to man. The great amphitheatre of snow streaked and spotted hills whence issue the affluents of Clear Creek, seems a world of itself, and immediately beyond it rises a jagged range, alternately white and black, inconceivably grand and rugged, fitly named the back bone of the world."

## MONETARY AND COMMERCIAL.

The demand for money in New York has increased, and the rates are higher. The same thing is, to a small extent, true here; for the money markets are sensitive to the slightest variation of the magnetic pole in New York. New York has become much more truly the centre of money than of commerce. The reason is, that it is the place where all the foreign houses, bankers, and dealers in money, transact their business for the whole continent; and an immense amount of foreign capital centers there.

The demand for money here, however, is not very great at this season, and therein this market does not follow that of New York, on account of a great difference in the season of doing business. For two months past, the demand for gold in New York has been pretty heavy. A large amount has been exported, and this always occasions some pressure in the money market. Here, however, July and August are always excessively dull months, and there is no special demand for Eastern payments; because, all western products have been and are very high. When that is the case, and there is yet a good supply of products, there can not be much pressure for money here. In the month past, the *rate of interest* has been comparatively low. Some money has been loaned, as low as 6 and 7 per cent.; while probably, very little good commercial paper has gone higher than 8 per cent. Taken, as a general average, money has been as low in the month of July, as we have ever known it. Still, money is not so cheap here, that it might not very conveniently be something lower. Looking to the fact, that we have *nine hundred millions* of currency; that the war is ended; that there is abundance of food in the country; and that all branches of industry are reasonably prosperous, *commercial business paper* ought not to be discounted higher than 5 per cent.; and if it were not that the government furnishes the best securities at 7-30, good paper would not be above 5 per cent. Whenever the Government ceases to horrow, unless the volume of currency is diminished, money will be very abundant and very cheap.

The following was the state of the market in the beginning of the week.

"There was a continued good demand for money to-day, hut there were no indications of stringency. Paper was taken freely at 8 @10 per cent., and call loans were made at 7@8 per cent. Whatever may be the cause of the stringency reported from New York, it does not make its appearance here, nor are there any signs of material change at present. The speculative movements in the share markets, which furnished increased employment for capital last week, have in a measure subsided, in consequence of a reaction in prices. Shares are not ready to follow, and gold sales are comparatively light."

From this, there is little variation in the past five days. Gold has been high in the week past, varying from 141 to 145. At the last date, it was rather lower.

There has been a rapid change in the market for flour and grain, both up and down. This is based on speculative views of the crops. Prices went up on the idea that the late rains had injured the crops; and then down, on accounts that they were not injured so much as was anticipated. In our opinion, the crops will be *decidedly short;* and if there was any reason for raising prices, the same reason holds good; but, the deficiency will not arise from recent rains, so much as from those which fell in May and June. The *wheat* is in the great producing States decidedly injured, and will fall short in *weight.* The corn will be good, hut was not so much planted. The oats and grass are good.

—The Chicago, Burlington and Quincy road is represented by

| | |
|---|---|
| Bonds and scrip | $5,924 968 |
| Stock | 8,376,510 |
| Total cost | $14,301,478 |

At its annual meeting in June the following statements were presented:

| | | |
|---|---|---|
| The balance standing to the credit of Income account at the end of the fiscal year ending on the 30th day of April, 1864, was | | $1,026,093 11 |
| The earnings on 300 miles of road were: | | |
| For transportation of freight | $3,395,679 45 | |
| For transportation of pass'gers | 1,158,595 21 | |
| For transportation mails and miscellaneous | 133.911 04 | |
| For interest and exchange | 14,630 36 | |
| | | $4,702,817 17 |
| Total | | $5,728,910 17 |

The expenditures chargeable to income account were:

| | | |
|---|---|---|
| Operating expenses | $2,436,147 10 | |
| Rent of depots and tracks | 17,921 60 | |
| Transfer office expenses | 2,000 00 | |
| Taxes, State | 71,845 74 | |
| Taxes, National | 176,873 00 | |
| Interest on bonds | 349,035 14 | |
| Premium on fractional stock | 8,491 61 | |
| Expenditures for improvements: | | |
| Artesian well at Aurora | $5,632 07 | |
| Bridge at Rock Island crossing | 6,755 84 | |
| Bridges on the line | 16,858 77 | |
| South branch depot and ground | 5,736 25 | |
| Buildings on the line | 12,591 16 | |
| | 47,485 09 | |
| | $3,109,800 28 | |
| Dividend May 25, 1864 | 262 844 00 | |
| Distribution of stock | 745 600 00 | |
| Dividend Nov. 15, 1864 | 519,600 00 | |
| Transfer to Sinking fund | 102,664 86 | |
| | | $4,740,509 14 |
| Balance, May 1, 1865 | | $988,401 03 |
| The capital stock of the company has been increased the past year by the sale of 10,537 7-10 shares of stock to stockholders at par, as per circular of April 29, 1864, and the distribution of 7,456 shares on account of surplus earnings of the road, and the issue of 30 shares in exchange for Chicago Burlington and Quincy, first mortgage convertible bonds, amounting in all to | | $1,805,300 00 |
| The bonded debt has been reduced | | 203,062 50 |
| Total inc. of stock and bonded debt | | $1,602,297 50 |

The expenditures during the same time for construction and equipment, including payments on account of purchase of road, has been as follows:

| | | |
|---|---|---|
| For new road from Chicago to Aurora | $252,242 57 | |
| For south branch dock lands, tracks and improvements | 33,376 29 | |
| For land, tracks buildings and improvements for cattle yards, Chicago | 210,339 70 | |
| For sundry other buildings at Chicago and on the line | 9,399 20 | |
| For lands for depot at East Burlington, and grading levee and buildings thereon | 41,159 09 | |
| For bridges and culverts, and other improvements on the line from Peoria to Burlington | 56,005 90 | |
| For depot grounds and buildings at Peoria | 49,545 31 | |
| For Union track, Chicago | 17,812 30 | |
| For completion of telegraph line | 4,961 48 | |
| For locomotive engines | $37,880 00 | |
| For passenger cars | 59,038 03 | |
| For freight cars | 243,260 79 | |
| | 340,178 12 | |
| For on account of purchase of Quincy and Chicago Road | 178,365 74 | |
| Total expenditures | | $1,193,385 70 |

The Treasurer's report shows the gross income of the 300 miles of road, the past year, to have been $4,688,186 70, being an increase over the previous year of $1,597,975 67, or 51 7-10 per cent. over the earnings of last year.

STEAMERS OF THE COLORADO RIVER, ARIZONA.—Considerable interest is being manifested just now concerning the navigation of the Colorado river. It has been demonstrated that the stream is navigable for several hundred miles, and the fact established that freight can be transported cheaper and quicker over that route than any other. Of the steamers on the river, an exchange says: "The Colorado Steam Navigation Company has the Colorada, Captain Johnston; Mohave, Captain Polhemus; Cocopah, Captain Robinson. The Philadelphia Mining Company has the Nina Tilden, Captain Avery. Captain Trueworthy has the Esmeralda.

OIL IN BRAZIL.—The discovery of kerosene in the Province of Jujuj, Brazil, promises to be a great thing for this country. Already kerosene lamps are replacing the old oil lamps, and one Lenardo Bella has applied to Congress for a patent for working the petroleum springs.

# COUPON AND LOCAL TICKETS!

CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

CONSECUTIVELY NUMBERED

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD.


## GOVERNMENT TRANSPORTATION.

GENERAL ORDERS No. 17.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., March 16, 1865.

1st. For the purpose of producing uniformity in the Transportation service and guarding against abuses, blank books of Transportation Orders will hereafter be issued from this office to the Chief Quartermaster of each Department, to be by him immediately furnished to each officer under his order entitled to issue the same; after the receip of which no other form will be used, unless in emergencies when the prescribed blank form cannot be had, and then the reason for not using it must be stated in the order.

These blank orders will be numbered and registered in this office in such manner that there will never be two orders of the same number in circulation; they will be charged to the Chief Quartermaster to whom sent, who will in like manner charge and hold responsible his subordinate officers.

On exchange of posts, or on transfer to another officer, like receipts must be taken and forwarded to the Chief Quartermaster of each Department.

2d. Within five days after the end of each month, a concise report will be made to the Department Quartermaster of the number of orders issued, the number cancelled by error (which must accompany the report), and the number remaining on hand, with a statement of the amount of transportation furnished in the month; which report in a condensed form (accompanied by the orders so cancelled) will be by him immediately transmitted to the Quartermaster-General, under envelope, endorsed on margin "Rail and River Transportation."

3d. The marginal register should contain the substance of the order issued, and will be preserved by the officer issuing for his own protection, or return to the Department Quartermaster or this office, as may be hereafter required.

*Care should be taken at all times to keep on hand a sufficient supply of these blank orders*, which can be obtained upon application to the proper Senior or Department Quartermaster.

4th. Unless in extraordinary circumstances, all rail and river transportation, passenger and freight, at any post, will hereafter be under the control and management of a single officer, on whom requisitions will be made by other officers requiring transportation.

5th. When more than five persons, in one party, are to be transported over one road, or a continuous line of roads, separate orders for transportation must be issued for each road to be passed over. These orders should be received on the train instead of tickets, and are to be receipted by the party named in the order, and given up on the cars—the officers, or persons in charge, filling the receipt with the number actually carried. Five persons, or a less number, may be carried over a continuous line of roads upon a single order for transportation, and this order may be exchanged at the starting-point for tickets over the entire route.

6th. Settlement should not be made nor vouchers given to railroads on orders for passenger transportation properly belonging to other roads, but the *passenger* accounts for each road should be made up separately in the name of the roads to which they belong.

7th. Appletons' Railway Guide for January, 1865, will be used as a standard for indicating routes and fixing distances, unless the actual distance is proved to be less, in which case settlement will be made on the basis of actual distance. Where this Guide cannot be more readily procured it can be furnished from this office.

8th. When a number of troops are to be transported from any point to any other point, on the same day or train, it should be done in squads as far as practicable. A single transportation order, or set of orders, should be given to the ranking officer, or most responsible person of the several detachments.

9th. Blank books of Free Transportation Orders will also be furnished, to be used on boats belonging to, or in the service of, the Quartermaster's Department, or on railroads operated by the Government. The free passes in these books will be given to persons entitled to receive Government transportation, and should not be issued without designating on the order the boat or road on or over which the person is to be transported. The marginal registers in these books will also be preserved for return to the Department Quartermaster, or to this office, as may from time to time be required.

Should the route to be traveled be in part over roads or on those owned by private parties or companies, care should be taken that Free and Pay Orders are given as the case may require, or such requisitions furnished as will enable the party entitled to transportation to procure it at points where pay transportation commences.

10th. To warrant the granting of transportation, except in cases specified by Regulations or General Orders, published for general information, the person demanding the same should show a requisition or order from competent authority requiring the movement by public conveyance in the performance of public duty.

The original requisition, when not necessarily required by the officer presenting it, should be retained by the officer furnishing the transportation; in other cases, a certified copy or necessary extract from the order should be furnished to, and preserved by, the officer granting transportation as his proper authority therefor, and a certified copy of the same must be endorsed on the back of the order.

11th. When the cost of transportation is to be reimbursed to the Government, as in the case of sick and furloughed soldiers, the required certificate should not only be made upon the furlough or order, but the transportation order should also be endorsed on the back substantially as follow: "The within transportation, furnished under General Order ——, and the proper officers duly notified. —— ——
A. Q. M."

12th. When transportation is granted to persons not in the military service, full explanations therefor should be given

13th. Orders for transportation should give the name of the party to be transported, or if there are several, then of the officer or person in charge, and state the number of men to be transported.

Orders for "one man," "ten men," and the like, without designating any name, are improper

14th. The receipts for transportation should be filled up in ink by the officer or person named in the order before signing, and if he cannot write his name, there should be a witness to his mark.

Names and places should be written distinctly in full, and not abbreviated.

15th. Duplicates of orders for passenger transportation should not be issued.

16th. When a requisition calls for transportation to any given point and return, the order should be issued to the place of destination, and the return transportation should be obtained at that point, provided it can there be procured.

17th. Upon the form of order now issued should be presented all the facts necessary to enable an auditing officer to decide as to the regularity or propriety of the order, so that it may be paid by any authorized disbursing officer.

18th. Erasures, interlineations, or alterations, if made against the interest of the Government, should be explained on the order by the issuing or other competent officer; otherwise, the transportation should only be settled for in accordance with the order before change or modification.

19th. Transportation by water being generally the cheapest should be selected when consistent with the interests of the service. All transportation should be furnished by the shortest practicable route, unless a different route is indicated in the order which directs the movement. Where there are two or more competing routes without material difference in distance or time, the business should be divided in equitable proportion between them, the distance for which compensation is made being estimated by the shortest practicable route.

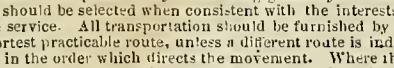
20th. In no case is subsistence furnished by the Quartermaster's Department.

21st. The good of the service requiring that railroads should obey the requisitions of officers properly authorized to demand transportation, in case compensation is made by the Government for illegal or unauthorized transportation so required, the officer making the requisition or issuing the order will be charged therewith, or if not paid by the Government, the railroad will be entitled to recourse upon such officer.

By order of the Quartermaster-General.

LEWIS B. PARSONS.
*Colonel, and Chief of Rail and River Transportation.*


# The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

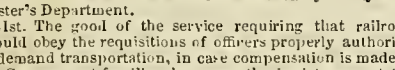
For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.
J. J. HOUSTON, General Freight Agent.
my11 Pittsburg, Pa.

## Change of Time, Sunday, June 18th.

THE

# Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:00 A. M., and 10:30 P. M.
Arrive at Cincinnati.....7:30 A. M., and 7:30 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

# WRIGHTSON & CO.

# BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO



# *STEAMSHIP COMPANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | | |
|---|---|---|
| WASHINGTON | 3,204 tuns, | 900 horse-power. |
| LAFAYETTE | 3,204 tuns, | 900 horse-power. |
| EUROPE | 3,254 tuns, | 900 horse power. |
| FRANCE | (afloat), | 900 horse power. |
| NAPOLEON III | (afloat), | 11,000 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its exuivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building) | 3,412 | ——— |
| ENGLAND (now building) | 3,430 | ——— |
| SCOTLAND (now building) | 3,430 | ——— |
| ERIN | 3,310 | Grace. |
| HELVETIA | 3,315 | Prowse. |
| PENNSYLVANIA | 2,872 | Grogan. |
| VIRGINIA | 2,872 | Lewis. |
| LOUISIANA | 2,166 | Axplett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to
WILLIAMS & GUION, No. 71 Wall street.
For steerage passage apply to
640* WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN | $90 00 | STEERAGE | $30 00 |
| First Cabin to London | 95 00 | Steerage to London | 34 00 |
| First Cabin to Paris | 105 00 | Steerage to Paris | 40 00 |
| First Cabin to Hamburg | 100 00 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR ..... 2,595 65-95 tuns.
WISLIAM R, BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge.

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

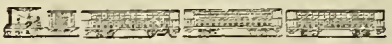
Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
640* JAMES A. RAYNOR, No. 10 Barclay street.



# CENTRAL RAILROAD
—OF—
# NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

# NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m.; 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.90; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

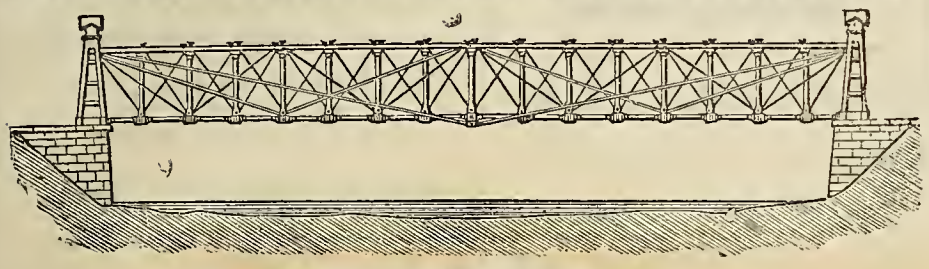
Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m., and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '63. 1y. Letter Box, 1393. C. J. SCHULTZ, Pittsburgh, Pa.

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27,1y

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

*Philadelphia, Pa.*

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or not of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive En-

419 y I

## KNOX & SHAIN,
## Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA.

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

## FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

## BUSH & LOBDELL,
## Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

Either Single or Double Plate,

With or without Axles.

## WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

## Manufacturers, Importers & Dealers

—IN—

## RAILROAD, CAR,

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

## MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

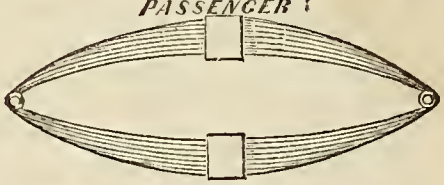
## RAILWAY SPRINGS.

**FREIGHT**

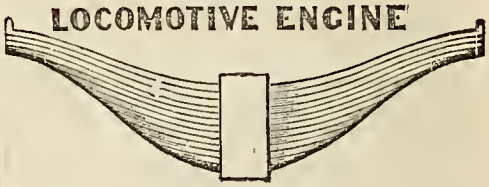




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

PHILIP S JUSTICE,

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

## W. M. F. HEWSON,
## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securties on Commisson only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by w running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHING. TON CITY.

W. P. SMITH, *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## Ittle Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 7 30 P. M. |
| Mail and Express | 9 00 A. M. | 8 15 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 30 A. M. |
| Morrow Accommodation | 5 20 P. M. | 8 00 A. M. |
| Eastern Night Express | 10 30 P. M. | 10 05 A. M. |

☞Sle ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Dayton & Sandusky Mail | 7 00 A. M. | 5 45 P. M. |
| Dayton & Toledo | 7 00 A. M. | 9 45 P. M. |
| Cin. & Chicago Air Line Express | 7 00 A. M. | 9 45 P. M. |
| Dayton Accommodation | 2 20 P. M. | 9 45 P. M. |
| Dayton, Toledo & Detroit, Huntsville | 5 00 P. M. | 10 20 A. M. |
| Cin. & Chicago Air Line Express | 7 00 P. M. | 2 35 A. M. |
| Hamilton Accommodation | 7 30 P. M. | 8 05 A. M. |
| do do | | 6 15 A. M. |

☞Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Ibuses call for passengers.

**SUNDAY, NOVEMBER 13, 1864.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St, Louis and Cairo Mail | 6:50 A. M | 1:00 A. M. |
| St. Louis and Cairo Accommodation | 4:00 P. M. | 12:00 noon |
| Louisville, St. Louis and Cairo Express | 8:00 P M. | 8:00 A. M. |

Two trains Saturday, Leaving at... 6.50 A. M. & 8:00 P. M.
Two trains Sunday, leaving at..... 4:00 P. M. & 8:00 P. M.

Saturday evening train connects for Louisville, and not for Cairo.

Sunday evening trains connects at Cairo

Sunday evening train at 8 o'clock connects for Louisville via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 89 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Main street.

C. E FOLLETT,
General Ticket Agent.

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indisnapolis. at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago n advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Altou train leaves Indianapolis at 8:26 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtaine at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, C ncinnati Agent.

## MOSELEY'S

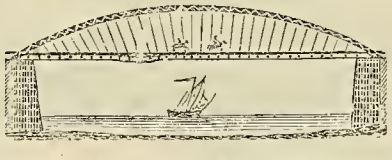
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2 MOSELEY & CO.,
BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June8

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facili es for forwarding the r work to any part of the country w thout delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅛ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—½ to 24 inches in diameter, and branches for same. &c.,

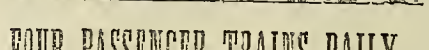
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11.30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P. M.

☞Through connections made for all points East a Wes

WM. BARNS SUPT

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, AUGUST 10, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 100 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M | 10:05 A. M. |
| Morrow Accommodation | 5:20 P M. | 7:45 A. M. |
| *Atlantic & Great Western—* | | |
| Morning Express | 9:40 A. M. | 7:20 A. M. |
| Night Express | 10:50 P. M | 6:30 P. M |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A M. | 9:45 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Toledo, Detroit and Huntsville | 6:00 P. M. | 12:50 P. M |
| Richmond and Chicago | 6:00 P. M. | 12:25 A. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | | 7:55 A. M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M |
| Indianapolis & Cambridge City | 6:00 A M. | 10.05 P. M. |
| " " " | 4:00 P. M. | 12:25 P. M. |
| Eastern Night Express | 10:50 P. M. | 7:50 A. M |
| Mail and Express | 9:40 A. M. | 6:30 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Springfield and St. Joe Express | 1:00 P M. | 5:07 P. M. |
| St. Louis and Chicago Express | 10:00 P M. | 5:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 5:15 P. M. | 8:20 A. M. |
| Harrison Accommodation | 9:30 A. M. | 8:40 P. M. |
| Chicago and St. Louis Express | 7:15 A. M. | 9:00 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 6:00 A. M. | 10:00 P M. |
| Connersville, Cambridge City & Indianapolis Express | 4:00 P. M. | 12:25 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 7:45 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:12 P. M. |
| Evening Express | 2:35 P. M. | 6:00 A. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## ON THE PACIFIC RAILROAD.

It is greatly gratifying to every truly patriotic and enlightened man to perceive that the Pacific Railroad is being pushed with vigor both on the Pacific and Atlantic side. The Union Pacific Railroad commencing at Omaha is progressing in a satisfactory manner; and with still more energy are the directors of the Central Pacific in California speeding on towards the top of the Nevada. The Road up the Kansas river is making good progress, and will, by its competition, cause the Nebraska Railroad to move forward with substantial workmanship and with a quickened step. In the editorials of the *Railroad Record*, it has been repeatedly shown that both these roads, as well as others, are wanted and will be profitable. Both possess great natural advantages—the one for connections further south, the other for connections further north. The Pacific Union Railroad, which begins at Omaha and follows the line of the Nebraska river for nearly or quite six hundred miles' possesses the greatest natural advantages from the facility of forming the road-bed and from the inexhaustible abundance of water. The difficulties of the South Pass are the worst it has to encounter; and probably these will be greatly lessened by taking a more southern route in which snow is less accumulative. Within one year more after the termination of the labors of this year, it ought to extend two hundred and fifty miles from Omaha. The number of passengers which emigration West and movement East will then supply when it shall have reached two hundred miles west of Omaha, will be such as to give an immense impetus to the Road, and to prove to the directors that great rapidity of construction, not neglecting to make the work substantial, will be the most profitable. A great depot of supplies will be inaugurated at this point whenever reached, and continued until it advances a hundred or two miles more; and so on. We are filling the solitudes of the world, and unfolding and unrelling the map of the earth as it has never been unfolded and unrolled before. Cicero, in his *Somnium Scipionis* (Dream of Scipio), introduces that great man describing, at the period to which the scene is assigned, the sparsely inhabited state of the Roman empire. This period was 148 years before the Christian era, when the great republic was far from having made all its conquests, but was possessed of Italy, Illyricum, the greater part of Spain, Egypt, Syria, Macedonia, Greece, a fine province in Asia, and a part of Gaul. The population of the Romans and the countries then subject to them, probably numbered fifty millions. But yet Scipio, addressing his adopted son (speaking of the territory subject to Rome), says, "you see that population is in rare and narrow places in the earth, and in the spots, as I may call them, in which it is inhabited, vast solitudes are interposed; and the inhabitants of the earth are not only so impeded and shut out from communication, that nothing can move easily from the one to the other. All the earth, which is cultivated by you, narrow at the neck, wider at the sides, seems a small island, laved by that sea which you call the Atlantic, the Great Sea, and the Ocean; which, nevertheless, dignified with so magniloquent a name, you still perceive how small it is."

But it would not have been plausible, it would not have been congenial to the structure of an ingenious fiction, to have introduced Scipio describing the Roman empire in this manner, in the days of Cicero himself; when the various roads which intersected it, and the vast increase of its population, would have rendered such representations absurd. But when we shall have got but a single line of the Pacific Railroad completed, we shall have done more to fill up "the vast solitudes interposed," to remove the impediments to communications between different regions of the world, and to vindicate the application of magniloquent names to the Atlantic, and to the Pacific, than has been done by the construction of the dozen largest railroads that have as yet been built. For we shall have made intercontinental communication comparatively easy, and we shall have bound our national Union together by the best physical means at our command. It will in a few years raise our production of the precious metals to the annual average of one hundred and twenty millions per annum. Thus the reduction of our national debt and the payment of the interest upon it will be afforded new facilities. Repudiation will fly, shrieking to the dens and caves of the earth, and the enlightened policy of the construction of this road will largely aid the maintenance of the national good faith, a treasure of inestimable worth; and serve to fortify our frontier in the event of foreign war. W. A.

## GRAIN CROPS, AND THEIR RELATION TO RAILROADS.

It is well known that with the settlement of the North Western States, the increase of grain crops, and consequently the supplies for eastern and foreign markets, have been equally great. Another consequence is, that the surplusses have been largely carried by railroad. In the first place there was a great deal more of such products than the canals and water courses could dispose of; and in the next place it was necessary for the roads to carry them from the interior to the line of the water channels. Hence the railroads, and especially those of the North Western States, have been busy carrying western produce to an extent which few even now comprehend. This traffic does not include merely grain, or flour, or even animals, but all the meats and oils, and liquors made from grain. In some shape or form the railroads transported the whole *surplus* of the Western States to the consuming and exporting markets. Ths surplus, when brought back to its origtnal form, amounted probably to *one hundred and fifty millions* of bushels of grain; or *four millions of tons.* Such is the enormous amount of

freightage furnished hy the surplus crops of the West. Hence, even a small per cent. of reduction on the general average of crops will make a decided difference in the freights of railroads. Hence, also, it is very important to form some idea of what the general crops will be. We can not arrive at detailed accuracy; but we can get a general view, which will serve as some guide to calculations for the future. *First*, what may we expect from the crops? Of *wheat*, we think the reduction of the crop, *from the general average, will be one third.* This is precisely contrary to what we thought three months ago. The crops in the beginning of May promised to be very large and fine. Why have they changed? The great difficulty is the immense amount of rain which has fallen in the last three months. The reduction of the crops is not caused, as many suppose, by the later rains; but by the heavy rains of May and June, producing ultimately a smallness and shrivelling of the grain. When the grain is thrashed it will not equal the expectations of the producer. Of *corn*, the great staple of the West, we believe there will be *less* than an average, although in all probability what is grown will be excellent. The heaviest rains fell at the usual period of planting corn. But little corn had been planted at that time; and the consequence was that *less breadth* of corn was planted than usual. This may not be true of all places; but is certainly true in the greater part of Ohio, Indiana, Illinois, which are the great corn States. All other crops are good Wheat and corn, however, furnish nearly all the *surplus* grain exported, and hence, the diminution of these crops is really a diminution of the *surplus to be carried.* Another thing we may remark, that the table of imports of grain at Chicago shows that the grain received there in the last current year is much less than in either of the two former years. This is important; for if there has been a past deficiency, as well as a present one, the effect, both on railroads and markets, will be much greater than if that deficiency was for one year only. We give our opinions for what they are worth; but it seems to us that things are tending towards two results in the next winter, viz: close markets for the consumers and less business for railroads. In the mean time let us take a view of the progress of the grain crops in the last twenty years. The following tables will give some idea of this. The following *aggregate* grain crops are taken from the correspondence and the reports of the Department of Agriculture:

| | 1840. | 1850. | 1860. | 1863. |
|---|---|---|---|---|
| Wheat | 84,82 ,273 bu. | 100.485.944 | 172 071 801 | 191,06*,000 |
| Corn | ..377,531,875 " | 592.071,104 | 886.401,593 | 452 446,128 |
| Oats | ..120.071 341 " | 146,584.179 | 172.643,185 | 174,*58 000 |
| Barley | 4.161,5*4 " | 5, 67,015 | 15 *.5.898 | 16,760,004 |
| Hay | .. 10,248.104 tons. | 13,*3*.642 | 19,028,262 | 20 000, 0 0 |
| Agg. | ..539,594,113 | 844,30* 242 | 1,196,907,877 | 835.132,132 |

We presume that in the estimate of the corn crops for 1863, the estimate is made only for the loyal States, that the great falling off in that crop was from the *frost*, which produced a most extraordinary destruction,—probably not less than *two hundred millions of bushels.* The aggregate of the wheat and corn crops for the above years were;

| | 1840. | 1850. | 1860. |
|---|---|---|---|
| Wheat and corn | ..462,355,108 bu. | 692,557,048 | 1,068,435,994 |

Increase from 1840 to 1850.....50 per cent.
" " 1850 to 1860 .....45 "

But in reference to corn and wheat it will give a more lucid view of the matter to give the amount and relative increase of corn and wheat in 1850 and 1860.

WHEAT.

| | 1850. bushels. | 1860. bushels. | Inc. per ct. |
|---|---|---|---|
| Ohio | 14,487,100 | 15,119,047 | 4 |
| Indiana | 6,214,000 | 16,848,267 | 170 |
| Illinois | 9,414,000 | 23,837,023 | 150 |
| Michigan | 4,925,000 | 8,336,368 | 40 |
| Wisconsin | 4,286,131 | 15,657,458 | 270 |
| Kentucky | 2,142,822 | 7,394,809 | 250 |
| Missouri | 2 981,652 | 4,227,586 | 35 |
| Iowa | 1,530,581 | 8,449,403 | 460 |
| Minnesota | 1,401 | 2,186,993 | |
| Kansas | | 194,173 | |
| Total | 45,982,587 | 102,251,127 | 122 |

The proportion of wheat raised in these States in 1850 was 45 per cent.; but in 1860 it was 60 per cent. of the whole amount raised. Estimating (5) five bushels to each inhabitant for consumption in food and seed, these States had a *surplus* in 1850 of 15,000,000 of bushels, and in 1860 of 52,000,000 of bushels. That is while the actual crops raised increased 122 per cent; the *surplus* increased nearly 250 per cent! This is a very important fact showing *that the production of wheat in the great central States is increasing at a rate double that of the population.* Of course the increase of railroad freight is at the same rate. There is every reason to suppose also that this increase will continue for many years. The development of wheat culture in Missouri, Iowa, Kansas and Wisconsin, is hardly more than fairly begun. These States will easily produce three-fold the amount they now do.

CORN.

| | 1850. bushels. | 1860. bushels. | Inc. per ct. |
|---|---|---|---|
| Ohio | 59.078,000 | 73,546,190 | 25 |
| Indiana | 52,964,000 | 71,*88,518 | 38 |
| Illinois | 57,646,000 | 115,174,777 | 100 |
| Michigan | 5,641,420 | 12,444,675 | 120 |
| Wisconsin | 1,988,979 | 7.517,300 | 280 |
| Kentucky | 58,672,591 | 64,043,633 | 10 |
| Missouri | 36,214,000 | 72.892,157 | 100 |
| Iowa | 8,656,799 | 42,410,686 | 400 |
| Minnesota | 16,725 | 2,941,952 | |
| Kansas | | 6.150,000 | |
| Total | 280,878,514 | 462.709,889 | 67 |

Hence it will be observed that these ten central States produced *more than half of all the corn carried in the United States;* and that half of them are comparatively new and unsettled. The five States of Ohio, Indiana, Illinois, Kentucky and Missouri can easily raise 500,000,000 bushels; and the other five half of that with moderate cultivation. In ten years more it is quite propable they will raise it, making seven hundred and fifty millions of bushels of corn in ten States of the Central Union. They can also double the amount of wheat. This *doubling the product of grain will quadruple the surplus.*

It is by taking this comprehensive view that we can comprehend that *all the railroads of the west will be profitable;* although it is quite probable receipts may fall off for a year or two.

## PACIFIC RAILROAD—EAST END.

The excitement of the war and the startling events which mark its close have almost entirely withdrawn attention from the progress of the great enterprise which is to unite the Atlantic and Pacific in iron bonds. The work on the eastern division, commencing at Omaha, Nebraska, and striking due west for the passes of the Rocky mountains, is so far advanced that 100 miles of the road will be in running order in December next.

The heavy work on the first division of 100 miles is all confined to the first section, between Omaha and Elkhorn river, a distance (by the line of the road) of about 26 miles. Commencing at the Missouri river, at the foot of Farnham street, the first five miles of graduation is now nrarly completed. It will be ready for the iron during the present month. The portion of the work is by far the heaviest on the first division of the road. By the first of July the grade will be completed to a point 18 miles west of this city, and the remaining 8 miles (to the Elkhorn river) will be finished by the first day in August. From the Elkhorn river to Fremont, (37 miles west of Omaha,) much of the graduation is already completed. Between the Elkhorn and the Loup Fork of the Platte river, at Columbus, nearly 100 miles distant from Omaha by the line of the road, the work is very light. Two hundred men, with the aid of the patent excavators, employed by the company on the work in the Platte valley, will finish up at least one mile of grade per day from Fremont to Columbus. September and October will afford ample time to complete the graduation of the road to Loup Fork.

Between Omaha and Columbus there will be but three bridges—one over the little Papillion, the second over the big Papillion, and the third over the Elkhorn river. Howe trusses for these bridges are already completed at Chicago, and will be shipped to this point by rail and river in few days. The masonry is under contract and progressing rapidly, and will be finished by the time the grade is completed to the respective streams.

About 40,000 hard wood cross-ties have already been prepared and will be delivered at Omaha before the first of June, at which time it is proposed to commence laying the track.

For the purpose of supplying additional ties as the track laying progresses, the company have provided themselves with four steam sawmills. One of these has been in operation in Washington county (14 miles north of this city) for nearly 12 months, and it is at this mill that the 40,000 ties above mentioned have been prepared. The machinery for the second mill is lying at our landing. Logs for this mill will be rafted down the Mississippi river from the heavily timbered districts north of the city. Two other sawmills have been shipped from the east, and are expected to arrive within the next ten days.

Hard-wood timber being scarce in this portion of Nebraska, the company have determined to use cottonwood for cross-ties until they reach the western portion of the Terri-

tory, where red ceader can be obtained in sufficient quantities. For the purpose of rendering these cottonwood ties as durable as oak, (and that this can be done has long since been attested,) the company have determined to resort to the process of Burnetizing. This process is similar to that employed for many years to prevent rotting of wood, and known as kyanizing. It is simply the expelling of the sap from the wood, by immersing it in a chemical preparation which enters the pores of the wood, and protects it against either dry or wet rot—at the same time rendering it practically fire proof, and as durable as the best oak or other hard wood.

The machinery employed in the Burnetizing process is an iron cylinder one hundred feet long—diameter of bore five feet and one inch. One of these immense cylinders, weighing fifty-five tons, was brought to this city on Monday, on the steamer Sioux city, from St. Louis, and is now at the landing. It will be placed in position for business within two or three weeks. Ties enough for half a mile of iron can be prepared for use every 24 hours.

A contract for the delivery at one million of brick by the first day of July next, was made by the company a short time ago. The buildings to be erected during the present summer and fall will require very nearly, if not quite, two million of brick; but there will be no difficulty in procuring all that may be needed.

About six hundred laborers are employed upon the graduation, and the work of constructing the road is being pushed forward, in every department with commendable energy.

Three locomotives will arrive from the east by the first of June, and the iron has been purchased (for the first 100 miles) in Pennsylvania, and will begin to arrive within the next three weeks.

We confidently expect that the first division of the road will be completed (to the Loup Fork, at Columbus,) by the first day of December. Such is the purpose of those who have the great work in charge, and they are certainly no physical obstacles in the way of its accomplishment. The same energy which is now exhibited in the prosecution of the work will complete it as far west as Fort Kearney, by the first of December of next year.

With the building of this great national thoroughfare no longer doubtful, the rapid growth and prosperity of Omaha are fully assured. Situated as it is, at the initial point of eastern terminus of the greatest railroad in the world—on the western bank of the first navigable stream which is reached in passing from the two oceans—600 miles from any important commercial city—with a rapidly improving mining country west of us, dependent for its supplies upon the most accessible point on the Missouri river, from which these supplies can be obtained most readily and cheaply—who can doubt that we shall, with the completion of the first division of this highway of commerce, enter upon a business which will increase, as the line extends westward, into a trade which is destined to render our city the chief commercial emporium of Missouri Valley.—*Omaha Rep.*

☞ The people of Warsaw, Illinois, are already looking forward to the construction of a road from Savanna to that place soon after the road from Galena shall be completed.

## MICHIGAN CENTRAL RAILROAD.

ANNUAL REPORT OF THE DIRECTORS—INTERESTING STATEMENTS BY THE PRESIDENT, SUPERINTENDENT AND TREASURER—INCREASED PROSPERITY OF THE ROAD.

The annual report of the directors of the Michigan Central Railroad, for the year ending June 1, 1865, has just been made out, for a copy of which we are indebted to the general agent, H. E. Sargent, Esq.

We are both pleased and surprised at learning that notwithstanding the greatly increased cost of operating the road, and the serious diversion of through travel, growing out of the passport regulation adopted and enforced during the last year, the net earnings exhibit a substantial increase of $24,846.36 over the previous year.

REPORT OF THE PRESIDENT.

J. W. Brooks, Esq., President of the road, makes a highly interesting report, from which we extract the following:

| | | |
|---|---|---|
| The bonded debt of the Company, June 1, 1864 was | | $7,740,938 89 |
| Less sinking funds—1st | $ 60 073 62 | |
| " " 2d | 132,086 44 | |
| | | 596.160 06 |
| Net bonded debt | | $7.144,892 83 |
| Capital Stock | | 6,315 906 00 |
| | | $13,460,734 83 |
| The bonded debt now is | $7,565,488 89 | |
| Less sinking funds— | | |
| 1st | $565,431 71 | |
| 2d | 167,680 51 | |
| | 733,112 21 | |
| Net bonded stock | $6.832 376 68 | |
| Capital stock | 6 491,386 06 | |
| | | $13,323,762 68 |
| Reduction during the year | | $136,972 15 |

The monthly earnings for the past two years were as follows:

| MONTHS. | Year end May 31st, 1864. | Year end May 31st, 1864. | Increase. |
|---|---|---|---|
| June | $200,921 37 | $265 780 35 | $59,558 98 |
| July | 193 328 17 | 263,344 53 | 69 916 41 |
| August | 215,449 14 | 346,781 36 | 131,3 2 22 |
| September | 308,177 99 | 408,144 58 | 100,276 59 |
| October | 37 ,497 91 | 410,802 08 | 35,314 17 |
| November | 339,793 70 | 405, 09 77 | 65.716 07 |
| December | 30 ,186 38 | 376,47 40 | 70 284 02 |
| January | 252,135 23 | 306,324 31 | 54,8 9 13 |
| February | 278,848 38 | 279,137 59 | 287 21 |
| March | 348,802 18 | 341,22 12 | ..... |
| April | 328,375 40 | 337,240 78 | ..... |
| May | 271,552 73 | 401,455 65 | 129,902 92 |
| Totals | $3,434,548 63 | $4,145 4 9 57 | $710,870 94 |

The total earnings for each year since 1857 will be interesting in this connection:

| Years end May 31. | Prssenger Earnings. | Freight Earnings. | Miscellan's Earnings. |
|---|---|---|---|
| 1857 | $1.610 415 75 | $1.413 492 47 | $80 694 47 |
| 1858 | 1.321,039 56 | 1,033,748 32 | 73,9 9 64 |
| 1859 | 93- 609 39 | 831,435 46 | 68,184 82 |
| 1860 | 803 567 97 | 962 621 70 | 66 15 19 |
| 1861 | 77 ,928 53 | 1.218,18 29 | 61,637 79 |
| 1862 | 724 915 48 | 1.559,060 98 | 77 26 96 |
| 1863 | 889 692 28 | 1.9-3,757 35 | 73,120 92 |
| 1864 | 1,902,415 07 | 2 073 274 71 | 98,8 8 80 |
| 1865 | 1,771 813 60 | 2 233,529 47 | 140,076 50 |

The following is a condensed statement of the earnings and operating expenses for 1864 and '65:

| | 1864. | 1865. |
|---|---|---|
| Passenger earnings | $1,2 2,415 07 | $1,771,813 60 |
| Freight earnings | 2,0 3,274 71 | 2,233,529 47 |
| Miscellaneous earnings | 98.858 85 | 140.076 50 |
| Total earnings | $3,434,548.63 | $4,145,319 57 |
| Operating expenses, including taxes | 1,720 123 05 | 2,406,149 63 |
| Net earnings | $1,714,423 58 | $1,739,269 95 |

The President says:

The rapid growth of our freight traffic to and from Chicago has begun to show that at no distant day we shall require increased accommodations at that point. It was not a necessity to buy additional ground there for immediate use, but the Government offered for sale at auction the large block of ground adjoining ours, and occupied by the Marine Hospital; it was better to buy somewhat in advance of our wants than to let it fall into other hands, and be cut up and extensively built upon. We have, therefore, purchased this, and such adjaining lots as will render it available. The hospital lot will not be given up by the Government until the new hospital is completed. The others are in our possession.

The live stock traffic, as heretofore conducted by the various railroad companies at Chicago, has been expensive and inconvenient, both to the railroad companies and the dealers. The stock has been landed by the incoming trains at various yards, several miles distant from each other, entailing great inconvenience upon the dealers in such a scattered market, and considerable expense in collecting for the eastern trains such as are bound for the seaboard. A remedy for the great cost and inconvenience of this system, or rather want of system, has been long sought for by the various railroad companies who have suffered so much from it, and it is hoped that the Union Yards now establishing by an incorporated company, the stock in which is mainly held by the railroad companies themselves, will prove the desired remedy. In these yards, it is expected all the cattle coming to Chicago will be landed, that those destined for local consumption or packing will be there sold, and those bound east will be taken from thence by the trains of the eastern railroads, adding at once to the convenience and economy of buyers, sellers and carriers. It is believed that this sytsem will exercise an influence upon the Chicago cattle market, in promoting the growth of this trade, to the advantage of all concerned.

We have expended in the purchase of lands

| | |
|---|---|
| at Detroit | $72,729 75 |
| Lands at Chicago | 108,004 30 |
| Union Cattle Yard Stock | 32,438 89 |

A part or all of the cattle yard stock assigned to this company may be sold to other parties, if it shall seem wise to do so. It will doubtless prove in itself a profitable investment, and when desired, will doubtless meet with a ready sale.

It is most satisfactory to note the steady increase of our local traffic, and its increasing diversity of character, rendering us less and less dependent upon a few employments or a few products, thus giving a greater uniform certainty to our business. A few years ago we were largely dependent upon the wheat crop for our prosperity; last year the earnings from wheat and flour were less than the year before, and our local freight shows an increase of thirty per cent., and our local passengers an increase of forty eight per cent.

Our net revenue suffered largely during the winter months, from the action of the passport system, which cut off at once our entire through passenger business, and the inability of the New York roads for a considerable time when rates were highest to get clear of a large accumulation of eastern bound freight. We must have lost by this unlooked for stoppage of our long traffic from one hundred to one hundred and fifty thousand dollars of net revenue.

Looking to these unfavorable events in our

traffic, and the considerable amount expended to increase and improve our property, which has been charged to working expenses, we think the stockholders have reason to be well satisfied with the result of the year's work, and with the local management, to which so much of our prosperity is due.

THE TREASURER'S REPORT.

Isaac Livermore, Esq., Treasurer of the road, reports as follows :

The accounts of the company for the financial year ending on the 31st day of May last, are herewith submitted, by which it appears that after paying a dividend of six dollars per share, and an extra dividend of six dollars iper share in July, 1864, and a dividend of sx dollars per share in January, 1865, and making the annual payment to the sinking funds, and deducting the usual disbursements for onerating, local taxes and interest, there will be found to the credit of income account the sum of $708,385.50. The balance of this account was $1,002,894.06 at the same time last year.

A comparison of the business of the year which has just closed, with that of the previous year, results as follows :

| | | |
|---|---|---|
| From June 1, 1864, to June 1, 1865, | | |
| The gross receipts were | | $4,121,212 97 |
| Operating expenses, including local taxes | $2,406,149 63 | |
| United States Government tax on dividend and possengers. | 165,264 94 | |
| Interest and foreign and local exchange | 622 980 96 | |
| Sinking fund payments | 84,500 00 | |
| Total payments | | 3,278,895 53 |
| Net | | $957,121 53 |
| From Junel 1, 1863, to June 1, 1865, | | |
| The gross receipts were | | $3,417.185 65 |
| Operating expenses, including loc l taxes | $1,720,125 05 | |
| Interest and foreign and local exchange | 600 216 77 | |
| Sinking fund payments | 84,500 00 | |
| United States Government tax on dividend and passengers | 57,222 30 | |
| Total payments | | 2,460,064 12 |
| Net | | $957,121 53 |
| Showing a decrease from the previous year of | | $114,804 00 |

The bonded debt has been decreased during the year by the conversion of $175.500 to stock. The company has no floating debt.

The capital stock has been reduced $20, by the purchase of fractional scrip to that amount; and increased, by the conversion of bonds, $175,500.

| | |
|---|---|
| The bonded debt amounts to the sum of | $7 565,488 89 |
| Capital stock | 6,491,386 00 |
| | $14,056,374 89 |

REPORT OF THE SUPERINTENDENT.

R N. Rice, Esq., General Superintendent, makes a highly interesting and comprehensive report, from which we make the following extract :

Earnings for the year :

| | |
|---|---|
| From passengers | $1,771,813 50 |
| " freight | 2,233,529 47 |
| " miscellaneous | 140,075 50 |
| | $4,145,419 57 |

Showing an increase over the previous year as follows :

| | |
|---|---|
| Increase on passengers | $509,398 53 |
| " freight | 160,254 76 |
| " miscellaneous | 41,217 65 |
| | $710,870 94 |

The large increase in local passengers may be attributed, in a measure, to the movement of troops to places of rendezvous, and thence on their way to the field ; but the gain has been principally in the regular business of the line, as the policy has been to cultivate the home business, by affording all reasonable and convenient facilities for its accommodation.

The wisdom of this policy must be apparent to all, when it is shown that during the existence of the Government order requiring all our through passengers via Canada lines to have passports, which order was in force some three months, the *total* passenger receipts were ahead of the corresponding months of last year, the gain in *local* exceeding the loss on through traffic.

The gain upon through passenger earnings for the year, notwithstanding the embarassments consequent upon the passport order, is 30 per cent., and this is almost entirely from the regular traffic, the geographical position of the road debarring it from participating, to much extent, in through business of the Government.

Within the past year, the old passenger dining house at Marshall has been disposed of, and a new and spacious passenger depot, with hotel accommodations, has been erected in its place. The building is an elegant and substantial structure, provided with all the latest improvements, and can seat in its dining hall at least three hundred persons. An establishment of this kind has long been needed, and instead of repairing the old building at a heavy expense, it was deemed better economy, even at the high cost of labor and materials, to erect a building that should be a credit to the company; and it is believed that all that was aimed at has been accomplished.

The rates on passengers and freights have been pretty steadily maintained the last year, as lines competing for the same trade with us have seen the importance, in view of heavy expenses, of maintaining fair and remunerative rates, so far as their respective charters would permit ; but no line has been enabled to advance its prices to a figure at all commensurate with the increased cost of operating.

All trains are still worked, as for some years past, under the telegraph system, which has been much improved by putting up an additional wire the whole length of the road; and the company now own two through wires between Detroit and Chicago. The same confidence exists as to the great value of an efficiently worked telegraph line, not only in the direction of trains, but in the transaction of a multitude of miscellaneous business connected with the different departments.

The protection of the company's premises on the river front from threatened raids from Canada, for several months, made it necessary to maintain an expensive organization, ready at any time to cope with any probable attack, there being no Government force provided for the purpose. This extraordinary expense is now dispensed with.

In conclusion, I beg to say that if satifactory results have not been accomplished during the past year, it has not been from lack of ambition on the part of those in charge of the different departments to do so, but owing to causes beyond their control. — *Western Railroad Gazette.*

## RAILROAD DECISIONS.

RIGHT OF RAILROAD COMPANIES TO EJECT COLORED PASSENGERS —THE VIEWS OF A PHILADELPHIA JUDGE.

It is a well settled rule of law, as stated in a recent number of the *Journal*, that railroad companies have the right to adopt and enforce all proper and reasonable rules for the regulation and conduct of their trains and of passengers riding thereon. A conductor may eject a passenger from the car, not only for misconduct, which is such as to disturb the peace and safety of the other passengers, but as well for noisy and disgraceful conduct, such as grossly profane or indecent language. But whether a conductor may eject a passenger on the sole ground of his color, is a question not so frequently discussed or so positively decided.

It appears, however, that the question has been brought befare the courts in Philadelphia; and for the information of our readers we give the charge of Judge Allison to the Jury. The case is Derry *vs* Lowry, and the plaintiff, who is a woman of color, sues the defendant, who is the conductor of a street passenger car, to recover damages for her forcible ejection from a car. The plaintiff alleged that she had been seated for a few minutes, when the conductor told her that no niggers were allowed to ride on that line, and that she must get out. Failing to comply with the conductor's command to get out, two men were called from the street, and the plaintiff was dragged out with great violence.

The conductor justified the ejection of the plaintiff by showing that the road had a rule that all colored people were to be excluded from the cars; that in obedience to this rule the defendant removed the plaintiff, on her refusal to go quietly.

Allison, J., charged the jury as follows :

The important question involved in this action is the right claimed by conductors of city passenger railways to refuse passage to persons of color, and to eject such persons from the cars of which they have charge, when entrance to the same is obtained without their knowledge or consent.

In most instances the conductor in charge of the car shields himself under an alleged regulation of the company of which he is an employee or agent. This is the case here, although in fact there was no such regulation of the Lombard and South street Passenger Railroad; the attempt to set up the existence of such a rule, enacted by the directors of the company utterly failed; but for the purposes of the case now under trial, I instruct you as a principle of law that the existence of such a by-law or resolution of the company would not avail the defendant as a justification for the wrong complained of in the plaintiff's declaration. It would be proper to allow proof of the existence of such a regulation, to be given to the jury in mitigation of damages, to show that the defendant did not of his own motion with wicked and malicious intention inflict personal violence upon the plaintiff, but that he was acting under the instruction of the company whose servant he was, in ejecting her from the cars.

The principles of law which govern city passenger railway companies, in no respect I am aware of, differ from those applicable to common carriers in general. They are companies chartered to carry passengers along a certain defined route, and between established

termini. They are chartered for the accommodation of the community generally, and to this end the uses of the public highway of the city, along and over which every person without distinction of age, or sex, or nationality or color has a right to free and unobstructed passage, is to the extent defined in the several acts of incorporation given to those companies for the construction of their roads. But these grants of the Legislature were not intended to divert the highways of the city from the purpose for which they were established; to some extent they change the mode of transit over said highway; but the object of the grant was in aid of this common right of passage upon and over the streets of the city; it was to render travel more easy and convenient to those to whom the right belonged, and this right is a common right, it belongs equally to the rich and to the poor, to the black man as much as to the white man. A company claiming to exercise the power which the defendant, acting for his principals, the Lombard and South street road, sought to enforce as against the plaintiff in this action must show the most clear legislative authority as a justification. The charter of this company has been put in evidence, and it is not pretended that such an express power is therein contained. Nor can it be reasonably argued that such a power is taken by implication; for its exercise is not in aid of that which is by the letter of the charter granted to the company, but in its practical application is a restriction of its general corporate authority in violation of its public duty, and at war with the purpose for which the body was created. The rule that lies at the foundation of all corporate right is that the power shall be strictly construed that corporations should be permitted to do only that which they take by express grant or that which by implication is conceded to them, when necessary to the existence of the body corporate or requisite to carry into effect the letter of the charter itself. Neither branch of the propositions which is one of the plainest axioms of the law has been established by the defence; on the contrary the act of defendant was a clear violation of the rights of the plaintiff when he put her out of the car, because her skin was a few shades darker than his own. The letter of the charter of this company did not authorize it; and the act, so far from being justified under the reserved or implied grant of authority was in itself a violation of the obligations and duties of the company who as a common carrier, are bound to carry every individual who, paying the amount of fare charged to others, desires to travel on the road, and as against whom no reasonable or well founded objection can be made on personal grounds.

The true principle is that a corporation created for the carriage of passengers has no right to exclude any class of persons, as a class, from the benefits of its mode of transportation. It may for cause either by or without a regulation exclude individuals. A corporation of this description might as well undertake to make nationality or religion a ground of exclusion, as color, it would not be difficult to determine in advance the legal force of a by-law excluding all Germans or Frenchmen, or Irishmen, or protestants, or catholics, Jews or Greeks as such from the passenger cars of the city; such an exclusion would not be tolerated by any intelligent tribunal; and yet in this the day of our corporative enlightenment, and freedom from a prejudice to which we were so long in bondage, a question can be seriously made before a court and jury, and practically enforced at the bar of public opinion, as to the right of an individual conductor or a company to turn persons out of the passenger cars of the city with force and violence because of their complexion. Than this nothing can be more unreasonable; nothing, in my opinion, is a clearer or grosser violation of the plainest principles of the law, and of the rights of individuals.

But it is asked, are these corporations powerless to protect themselves or the passengers whom they carry. By no means; they have a perfect right to exclude any one not a fit person to ride in their cars. Intoxication, profane or indecent language, the presence of one afflicted with an offensive or contagious disease, smoking in the cars, are but illustrations of the principle, because these are a reasonable offence to the traveling public; these of themselves constitute a ground for exclusion or removal; but the mere prejudice of one class against another, can not be allowed to subvert or overthrow the cardinal doctrine of the equality of all before the law, in the maintenance of the sacred rights of power and of citizenship.

The argument which is used as a justification for the exclusion of people of color from the cars, would shut them out from and bar against them our courts of justice, forbid to them the use of public ferries, bridges and highways, and rests not upon the principle of legal or moral right, but upon bald, naked prejudice alone. It is our duty, gentlemen, in the discharge of our duties, you in your sphere and I in mine, to cast aside all prejudice, that the law may vindicate its just claim to strict and impartial justice. And if, by the action of courts and juries, wrong has been done to that class of citizens to which the plaintiff belongs, it is time that such errors shall be contradicted.

The logic of events for the past four years has in many respects cleared our vision and corrected our judgment, and no proposition has been more clearly wrought out by them, than that the men who have been deemed worthy to become the defenders of the country, to wear the uniforms of the soldiers of the United States, should not be denied the rights common to humanity, and this not only without law, but against law, and the plainest principles of right and justice. The judge further charged the jury that the instructions of a principal to a subordinate to do an illegal act, such as to commit an assault and battery upon the person of a citizen was no justification of a subordinate for so doing, that such a plan could not shield a conductor of a car from his accountability before the law, to the person injured.

He also instructed the jury upon the question of the violence inflicted by the plaintiff upon the defendant; that if such violence was used in defence of her person when assaulted by the defendant, and was in no greater degree than was necessary to defend herself against the attack made upon her person and rights, the law would justify her in the employment of such force. Nor would the use of excessive force by her in resisting a personal assault be a defence to her claim for damages; it may be taken into consideration by the jury upon the question of the amount of compensation to be given her but not as defence to the action.

That the jury, for a wrong like that complained of by the plaintiff, may go beyond mere compensatory damages, and may give vindictive damages by way of punishment.

Verdict for plaintiff $50 damages.

## THE STREET RAILWAY CAR AND ENGINE.

The importance of the street railway to the convenience of the great mass of the inhabitants, is good reason why we should try to perfect the system. The horse railroads, as they are called, have simplified and improved very much the city and suburban passenger traffic. They have relieved the streets from the crowds and shoals of omnibuses, and have practically saved the labor of horses one half; or rather one horse on the rail car can haul as much as two with an omnibus. The comfort of the passenger is vastly increased, and the expense may be decreased, if we take advantage of all the improvements which experience shows are every way practicable; and by this the substitution of steam-power for horses. The reason why passenger traffic has to pay so high a price on the steam-railways proper, is because of the disproportion of the paying to the non-paying load. It is the great weight hauled that eats up the receipts, and just in proportion as we can reduce the non-paying weight, just so much can be saved to the companies, and eventually to the public. The steam car for street railways seems to have an element in which it is particularly designed to solve this question of a reduction of the non-paying load. The cars running on the street-railway to Quincy weigh between five and six tons, with coal and water, and comfortably seat thirty passengers, and frequently carry as many more standing. Allowing an average weight of 150 pounds per passenger, this would be, say, 4½ tons of passengers, to, say, six tons of non-paying load; this is a great saving in comparison with the passenger traffic of the regular steam railway, where the proportion is about four not paying to one paying portion. This saving of dead or non-paying weight on the street-railways is quite remarkable, but the managers of the Metropolitan line, who have lately purchased several of Messrs. Grice & Long's engines for use on their out-of-town branches may possibly improve even upon this great saving. They have built several horse cars with a deck and seats over the main car. By the use of lighter and stronger materials than is usual, they have succeeded in making a car which will carry, seated, 46 passengers, while the car itself weighs 4,600 pounds—the paying load being one-half greater than the non-paying load. The car is ingeniously arranged and every way comfortable. Now the street steam cars have motive power capacity far in advance of that commonly used; they can run twenty miles to the hour, and carry the full-loaded car up a grade of between three and four hundred feet to the mile. This was done to the satisfaction of a large party of influential persons in New Jersey. It would be a very easy thing to re-arrange the street steam car upon something like the same plan which the Metropolitan Company have used, and it would likewise be perfectly easy for the engine to haul one of these Metropolitan cars in addition to the regular load. The addition of a brakeman to the hind car would be all that is necessary to work the two cars about as easy as the steam-car itself is worked. The increase of direct load on the steam car is in no sense an objection, as the extra weight only operates to give additional adhesion to the rail, the steam pressure being at all times in excess. The amount of coal used per mile averages about seven pounds. All these facts demonstrate how important it is to use all diligence in perfecting and carrying into early use this time and money saving street steam-

car, or "dummy," as some prefer to call it. While it promises so much to expedite and cheapen the passenger traffic on our common roads, we see no reason why it could not work all the passenger traffic on the branches of the regular steam-roads. The saving of dead weight and the light running expense for all this service would in the aggregate amount to a very handsome sum.—*Railway Times.*

## WEST END OF PACIFIC RAILROAD.

The great need of the Pacific States and Territories is the early completion of the Pacific Railroad, by which vast mineral regions and immense tracts of agricultural lands will be open to the more redundant population of the Atlantic States and Europe. The steam ship monopoly is already an almost unbearable nuisance. Those only who are able to pay an enormous fare can emigrate to the Pacific side; and they are but a drop in the bucket to those who would make their homes in this highly favored land.

On this side of the Central Pacific Railroad Company are pressing on the work with unflagging energy. The route from Sacramento to Salt Lake City is almost a direct line. The terrible Snowy Mountains are crossed at an elevation of 7,000 feet, by a maximum grade of only 105 feet—showing more favorably in that respect than any other mountain road in the country. Over 3,000 men, with teams, are employed—all that can be worked to advantage—in extending the track toward the summit. The railroad is now completed and in operation to Clipper Gap, 43 miles from Sacramento, at an elevation of 1,800 feet. By the first of October it will be extended to Illionoistown, fifty-five miles, and to Dutch Flat, sixty-eight miles, in time for the spring business of 1866. Thence on to the Big Bend of the Truckee river, to which point the road has been located—a distance of 178 miles from Sacramento—the track will be laid and in operation within two years. This comprises all the heavy work, and overcomes all the difficulties of this great enterprise. At the Big Bend of the Truckee commences what is called the Homboldt Desert. In the distance to Lossens Meadows, on the Homboldt river, 104 miles, there is only a difference of elevation of 250 feet. Following eastward from Lossens there are 190 miles of unobstructed valley, 145 of which has a grade of only *four feet* per mile, and none of the distance exceeds 36 feet. From Lossens Meadows to Salt Lake is 142 miles, the cost of construction being estimated at $45,000 per mile. After passing the summit of the Sierra Nevadas, the Pacific Railroad ought to be built at the rate of ten miles per day. Whatever may be said as to the routes eastward from the Sierras, nature has settled the question of choice in an authoritative manner. The road must pass up the valley of the Humboldt river. To deflect from this would be to encounter a dozen ranges of mountains, either of which would repeat the obstacles encountered in crossing the Nevadas. Urge on the building of the Eastern section of the road, where all the appliances of a rapid construction are to be found in superabundance, and we will meet you beyond Salt Lake—1,000 miles from San Francisco—within five years. With energy on the Atlantic side equal to that now shown by the Pacific Company, five years will complete this gigantic national highway.

[From the New York Tribune.

## FROM THE MISSOURI TO THE PACIFIC.

DENVER, Colorado, May 29, 1865.

The commerce of the Plains is worthy of Mr. Lincoln's favorite quotation from Virgil, *Res magna est*, which he rendered in the vernacular, "It is a big thing!" Our route from Atchison is only one of the half dozen great thoroughfares from the Missouri to the mountains. The Indian massacres and devastations of last year, the raids and murders during the present season have almost stopped migration, and greatly diminished freighting. Yet the road is dotted with the white covers of wagons—snowy sails of the great land fleets that for half the year move westward over this vast ocean of prairie and desert. Within the last few weeks more than six thousand wagons have passed Fort Kearney—nine hundred of them in three days. They are each drawn by from two to twelve oxen, mules or horses, and carry from two to eight thousand pounds of machinery, goods or provisions.

They toil wearily along, from twelve to twenty miles per day. The long bearded shaggy drivers, tanned to the hue of Arapahoes, look like animated pillars of earth, and seem under the perpetual sentence: "Dust thou art and unto dust shalt thou return." Each keeps his trusty rifle or shot gun within grasp; and at night the wagons are parked in a circle, and the cattle driven into the extemporized yard which they inclose, as a protection against Indian surprises. Eternal vigilance is the price of travel. The children of the immigrants revel in dirt and novelty, but their mothers cast eager longing eyes toward their new homes. There is profound truth in the remark of a Denver lady that "plains-travel and frontier life are peculiarly severe upon women and oxen."

A stage-coach of the Overland Line, filled with passengers and weighed down by half a tun of mail, starts daily from Atchison, Kansas, going West, and another from Folsom, California, coming East. The stations average about ten miles apart. You roll up to one of them; four fresh horses, all ready in the harness, are exchanged for your pantiug, smoking team, and in from three to ten minutes you are again whirling along. Three times every twenty-four hours you stop half an hour for a meal—often a culinary marvel—of good coffee, sweet milk, fresh butter and eggs, canned fruits, ham and venison—but with no other detentions you go on, on, on, sitting bolt upright, for upwards of twenty days and nights.

I have been six times over 700 miles of the route, and, after the first night, have always found my sleep nearly as sound, and quite as refreshing, as in bed at home. After such an experience, it is easy to believe that the Esquimaux and some other tribes always sleep, from choice, in the sitting posture. At the end of the journey, a bath, clean clothing, and two hours in the hands of the barber, make one forget his fatigue, and feel fresh and elastic.

The trip is often made by women and children. I once rode from Denver to Atchison, for six days and nights, in charge of a lady with an infant of eleven weeks and a boy of four years. When we started, the mother was so weak and reduced, from a long siege of typhoid fever, that she could barely walk, and her thin face wore almost the pallor of death. She found the first twenty-four hours very hard, but then rallied, developing a ravenous appetite. Before we reached the river, the roses had come back to her cheeks and the vigor to her frame. Nature is very kind when we trust her fully, and the breeze of the Plains—so dry that colds and rheumatisms become only a tradition, so pure that fresh meat cut in strips and exposed to it will cure perfectly, and may be carried all over the world without smoking or salting—bears healing and vitality upon its wings.

Western Kansas is full of openings for the farmer. At the crossing of Big Sandy, where the soil will produce from thirty to forty bushels of corn to the acre, that grain now commands three dollars per bushel, and is sometimes even higher. The soil of the prairies grows thinner and thinner, until you strike the American Desert—a vast, dreary expanse of cactus and greasewood sandhills. It seems worthless for farming, but nature designed it for the grand pasturage of the continent. Even the frosts of winter do not destroy the nutritive qualities of its dry, shriveled grass, which will support and fatten stock during almost every month of the year.

The Desert ranches and stage-stations are of sods, which the sun bakes almost to the hardness of bricks. In that treeless region they make excellent dwellings, cool in summer and warm in winter. Few have been rebuilt since the Indian depredations of last year, and many graves, with rude headboards and wooden railings, tell their own sad story.

Four cavalrymen accompany each coach, and at every station is a little detachment of infantry. They are all rebel prisoners or deserters who have taken the oath of allegiance and enlisted in the United States service. They style themselves "Galvanized Yankees," and make excellent soldiers.

The antelope still abounds on the Plains. Far away, when you can not distinguish the rest of his earth colored body, you see his white tuft of tail fluttering in the air. Galloping over the hills, he is grace personified—the very embodiment of the poetry of motion. From a nearer view you read ineffable tenderness and pathos in his gentle, liquid eyes. Many rifles and shot-guns have made him shy; but he is naturally tame and easily domesticated. Once, on the lonely mountain trail from New Mexico to Denver, a long herd of antelopes slowly crossed the path before me, so near that I could have hurled a pebble to them. They were in single file, and some were spotted with white—a rare and exquisite combination of color. I stopped my horse to let them pass, and counted 127 of them.

Europeans would find amusing American incongruities in the Overland trip. As we reached one station our driver enjoined the waiting hostlers: "*Gents*, we are four hours behind, and want to make up the time. We must change these teams in three minutes by the watch." At the last telegraph station the operator said to Mr. Colfax and his party: "The Denver people are making preparations to give *you fellows* a grand reception.

The Plains afford the best natural roads in the world. Many years ago, F. X. Aubrey galloped from Santa Fe, New Mexico, to Independence, Missouri, more than 700 miles, in less than seven days. He changed horses three or four times, and won his wager of $1000; but at the end of the journey he was so stiff that he had to be lifted from the saddle. Last year, Ben Holladay, proprietor of the Overland Line, rode in a coach from Folsom to Atchison, 2,030 miles, in twelve days and two hours. That was a trip worth the making! In view of it the locomotive hides its dimin-

ished head, Arion and the dolphin, Aristo and the hippogriff, became pleasant possibilities. The thought of it takes away one's breath. Across the Sierra Nevadas, whirling through snow drifts of the canons, with overhanging rocks 2,000 feet above your head, spinning along the perilous edge of many a dizzy precipice, gliding through the great basin with its endless alkaline wastes, rattling up and down the frowning cliffs of the Rocky Mountains, shooting through the sands of the measureless desert, in all-enveloping clouds of dust, rolling merrily over the gentle swells of the flower-spangled prairie! Night and day, through storm and sunshine, shivering in frost, panting in tropical heat, shrinking under pelting hail, cowering in the lightning's fiery track, across the continent, from the serene ocean to the turbid river!

Mr. Holladay accomplished one route of 14 miles in 45 minutes. During our own trip we frequently exceeded 10 miles an hour, and once we came 11 miles in 55 minutes. We arrived here at noon on Saturday, four days and twenty-two hours from Atchison, though we made extra delays of ten hours on the way. The distance is 642 miles; the regular stage time, five days and four hours.

Gov. Evans, Mayor Clark, Mr. Byers of the *Rocky Mountain News*, Dr. Cass, and other citizens, met our party three miles from Denver, and escorted us in. The same evening Mr. Colfax addressed a large gathering of the people, who received him with great enthusiasm. He described his parting interview with Mr. Lincoln, which ended but two hours before the assassination; and bore to his auditors the dying message of the President—his very last conversation upon public affairs—as nearly as possible in his own words. Mr. Lincoln said:

"I have very large ideas of the mineral wealth of our nation. I believe it practically inexhaustible. It abounds all over our Western country, from the Rocky Mountains to the Pacific, and its development has scarcely began. During the war when we were adding a couple of millions of dollars every day to our National Debt, I did not care about encouraging the increase in the volume of our precious metals. We had the country to save first.

"But now that the Rebellion is overthrown and we know pretty nearly the amount of our Debt, the more gold and silver we mine, the easier becomes the payment of that Debt. Now (with much emphasis) I am going to encourage that in every possible way. We shall have hundreds of thousands of disbanded soldiers, and many have feared that their return home in such great numbers might paralyze industry, furnishing suddenly a greater supply of labor than there will be demand for. I am going to try to attract them to the hidden wealth of our mountain ranges where there is room enough for all. Immigration, which even the war has not stopped, will land upon our shores hundreds of thousands per year from over-crowded Europe. I intend to point them to the gold and silver that waits for them in the West.

"Tell the miners from me that I shall promote their interests to the utmost of my ability, because their prosperity is the prosperity of the nation; and we shall prove in a few years that we are, indeed, the Treasury of the World. * * * * Don't forget, Colfax, to tell the miners that this is my speech to them, which I send by you. A pleasant journey, and good bye."

Mr. Colfax spoke with his usual felicity upon the close of the war and the future of the West. At the conclusion of his remarks three rousing cheers were given for him. The other gentlemen of his party were successively called out, and the American fondness for speech-making and speech-hearing were amply indulged.

We leave for the mines this morning. In my next I hope to give some trustworthy statistics concerning the development, products and immediate prospects of Colorado.

## TOLEDO, PEORIA AND WARSAW R. R. CO.

This Company closed its fiscal year the 14th of June last. The Secretary's report, made up to the 1st of that month, shows the gross earnings for the year to have been $489,874 30, a gain over the year preceding of $177,479 26. The net earnings, deducting operating expenses, repairs, etc., were $210,940 72. Subtracting interest six months on bonds, there remains to credit of income account $162,789 72. The length of the road from State line to Peoria is 111 miles.

The rolling stock on June 1st consisted of 15 new locomotives, 201 freight cars, (116 new) 66 flat and cattle cars, (22 new) 6 passenger cars, 3 baggage and 5 conductors' cars, of a total value of $464,000.

This company was originally the eastern division of the Peoria and Oquawka Railroad Company, commencing at the State line of Illinois, and running west to Peoria, and was recognized by an act of the Legislature of Illinois in 1863.

For reasons of difficulties with contractors, the corporation was placed in the hands of Charles L. Frost, Edward Weston, and H. G. Marquand, as Trustees, by the mutual consent of the bondholders and contractors, and was foreclosed under the several mortgages, and purchased by the Trustees for the benefit of parties in interest in the old company.

Principal and interest in all the indebtedness was allowed. New first mortgage bonds were issued for the first mortgage indebtedness, and first preferred shares were issued for 2d mortgage bonds.

Second preferred shares were issued for contractors' claims, and common stock for the original subscribers to the old company.

The company now own the following bonds and stock of the company for the purpose of purchasing additional equipments, and for building the road to Warsaw under the charter of the Mississippi and Wabash Railroad Company, which Corporation are to be amalgamated or consolidated with this company, viz.:

| | |
|---|---|
| 1st mortgage bonds | $209,000 00 |
| 1st preferred stock | 78,000 00 |
| 2d preferred stock | 95,000 00 |
| Common stock | 1,274,300 00 |

Distance from State line to Peoria, 111 miles.
From Peoria to Warsaw & Keokuk, 116 miles.

Whole length will be.....227 miles.

The road west of Peoria is built and running from Warsaw to Carthage, 18 miles, and more than 70 miles of the road between Carthage and Canton is graded and ready for the ties and iron.

Vigorous efforts will be made the coming year to complete the road to Canton, in Fulton county.

The line runs through the most densely populated agricultural region of Illinois, and forms, in connection with the Toledo and Wabash Railroad Company a direct line from Lake Erie to the Mississippi River, and comes into direct competition with the Chicago and Burlington Railroad Company for the Easterm business from Southern Iowa and Mississippi river, as it will shorten the line to Warsaw and Keokuk some 100 miles. Arrangements are being made to open a direct line from New York and Philadelphia to Peoria and Warsaw, *via* Fort Wayne by the New Jersey Central and Pennsylvania Central Railroad Companies, which will save some 12 hours time to Peoria.

When the line is completed to Warsaw, it will connect with the Alexandria and Bloomfield Railroad at Warsaw, and the Iowa and Missouri State Line Railroad to Nebraska City, forming a continuous line from New York, to connect with the Central Pacific to Fort Kearney; and from Keokuk it connects with the Keokuk, Des Moines and Minnesota Railroad, which is now in operation to within 20 miles of Des Moines, and to which place it will be completed this year without doubt.

The Iowa and Missouri Railroad, under the efficient management of E. Robinson, Esq., President, has already some seventy miles of road graded, and there appears to be a determination on the part of the people on the line to open this great highway to the gold region and to California before any other road in Iowa is completed to Omaha, to connect with the Union Pacific Railroad Company.

## THE PITHOLE OIL REGION—VENANGO COUNTY.

We paid a visit to this modern Mecca on Monday last. It is the present great centre of attraction for all who are interested in oil, or that are anxious to make money fast. The emigration to the different localities surrounding the United States and other wells, is unprecedented. All the approaching roads are filled with eager horsemen, and wagons loaded with goods, machinery and household effects of every description. The new town of Pithole is being rapidly built up, and has already assumed the dimensions of a large and flourishing town. The United States Hotel, admirably kept by Robinson & Masseth, is the principal one, though another, the largest we have seen in the oil region, is being erected. Boarding and lodging houses exist by the score. The new banking house of Prather, Wadsworth & Co., has just commenced operations. This firm we recommend to the favorable consideration of the public, as in all respects responsible and worthy. Several shingles informed us that surveying, conveyancing, and legal business generally, was or would be transacted by disinterested parties, upon reasonable terms. The provision stores are numerous. The "refreshment" saloons are legion. No occasion for the wayfarer to go thirsty or "long between drinks," if he has the inclination or means. Quite a number of oil operators have opened offices at this point. Among these we may mention Fisher Brothers, of this place, and Mr. J. F. Duncan, of Pittsburg. On almost every house, post and tree, are placards, announcing leases, indentures, or lands for sale. Every one was busy, and all appear to be making money. Never was seen the spirit of speculation more rife. We caught the infection ourself, offered to take the sixteenth of a working interest in a lease a few feet from the United States well, from a friend, and pay him for it when the well was down, or take the refusal of the

Holmden farm, and the whole of Pithole creek for sixty days Both offers were declined, and thinking our ideas of speculation were not properly appreciated, we quit. The United States well still maintains its wonted flow. It is producing, we think, about 800 barrels per day. The twin wells, immediately adjoining, are producing some 600 barrels. Both have their sucker rods in. Hope the owners will keep them in until the railroad is completed from Oil City to Pithole, about ninety days hence. Tanks by the acre surround the three wells named, and the amount of oil on hand is very considerable. Captain J. J. Vandegrift and Asa W. Say, (lucky men,) secured some four acres in fee right adjoining these wells, on the Rooker farm. This they are disposing of at a profit that would send a Wall Street broker into convulsions. It is a choice piece of territory, and we are glad to see our friends so fortunate. The Homestead well, on the Hyner farm, just adjoining the Thomas Holmden, is estimated at 500 to 600 barrels per day. On all these, as well as the adjoining farms, the greatest activity prevails. Derricks are multiplying by the score, and engines are being put to work as fast as they can be got on the ground. Small towns are being built, and the general appearance and thrift of the whole place is unequalled in the history of any country. Several wells are down and nearly ready to test.—*Oil City Register, July* 13.

## MONETARY AND COMMERCIAL.

As we stated in our last number the moderate stringency of money market in New York and the higher price of gold, created a slight stringency here, although much less than in New York, for reasons we then gave. The demand for money is rather increased, and the market less easy, and the rates of discount (8 to 10 per cent.) rather higher; still there is no such pressure for money as to be seriously felt, and it is not probable there will be any before December.

The flow of gold to Europe has been arrested and scarcely any is now shipping. We hear to-day, that Goverment Bonds are going to Europe freely, instead of gold. A million and a quarter of 5-20's was shipped in one day.

The gold market has ruled strong, though rates were a shade lower than they were in the forepart of the week, but the change has been light, comparatively. The daily fluctuations in New York were as follows:

| | Opening. | Highest. | Lowest. | Closing. |
|---|---|---|---|---|
| Aug. 1 | 144⅜ | 145⅛ | 143⅞ | 145⅛ |
| Aug. 2 | 144⅞ | 145⅝ | 144⅞ | 145⅜ |
| Aug. 3 | 144¼ | 144¾ | 144 | 144¼ |
| Aug. 4 | 144⅓ | 144⅜ | 133¼ | 143⅜ |
| Aug. 5 | 143½ | 143⅞ | 143½ | 143⅜ |
| Aug. 7 | 144 | 144⅞ | 143¼ | 144 |

Yesterday it opened at 144¼, advanced to 144¾, and closed at 144½ at half past one o'clock in the afternoon. United States bonds declined in London to 71, with a weak market, and we notice that the foolish reports regarding the probability of the Government paying the Southern debt in part has been revived there again. The legislator in the Northern States who would advocate such a theory, either directly or indirectly, would be displaced from his position with an unanimity rarely expressed.

On the 9th inst., the price was 143¾! In fact, for ten days gold has remained very steady.

All inquiries, as to business, now turn upon the crops. We see no reason to change our opinion given last week, that while most of the crops are good, the wheat crop will be *considerably below the average*. We do not believe, as some do, that there is any uncommon quantity on hand. We think, when the 1st of January comes, it will be found, that the quantity of wheat on hand in the country is not as great as many anticipate. The grain of the present crops, we think, shrivelled to a greater extent than is imagined.

There is a strong prospect of an excellent corn crop, as far as it goes. But, it is quite certain, that in Ohio, and probably in all the great corn States, the *breadth* of land planted is less than usual. If we get an average crop, it is as much as we can expect. Oats, grass, potatoes, and miscellaneous crops are good. Taken in the *aggregate*, we think, the whole *weight* of vegetable crops (and that is the true standard of measure,) will be greater than an average. *Prices* of almost everything are still very high. People complain of this, but scarcely with reason. If we take 40 per cent. average premium on gold, and high taxes, the increased capital necessary to do business, and the high price of labor,—we shall soon find, by actual computation, that the prices of agricultural and manufacturing products must be high. The price of merchantable flour is now about $8 50 per barrel. This is about $6 40 in gold; then take half the price, as paid for labor, at 50 per cent. advance, and we find the price of a barrel of flour computed at old rates is just about $4 40, which is almost exactly the average of flour before the war.

—The earnings of the Racine & Mississippi and Northern Illinois railroads for the week ending July 21 were:

| | |
|---|---|
| 1865 | $15,801 93 |
| 1864 | 11,703 49 |
| Increase | $4,098 44 |

Receipts from January 1 to July 21:

| | |
|---|---|
| 1865 | $344,232 59 |
| 1864 | 306,565 96 |
| Increase | $37,666 63 |


Best Route to St. Louis and Chicago.

MONDAY, OCT. 31.

Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M. |
| Springfield and St Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10: 0 P. M. | 5:20 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harris n..... | 9:30 A. M | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt.



1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY TO EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI | 9: 0 A. M. | 10 40 P. M. |
| HAMILTON | 9:57 " | 11:43 " |
| DAYTON | 11:30 " | 12:55 A. M. |
| SPRINGFIELD | 12:35 " | 1:45 " |
| URBANA | 1:40 P. M. | 2:15 " |
| GALLION | 5:25 " | 6:10 " |
| MANSFIELD | 6:50 " | 7:15 " |
| AKRON | 9:30 " | 10:00 " |
| RAVENNA | 10:05 " | 0:40 " |
| LEAVITTSBURG | 1:00 " | 11:30 " |
| GREENVILLE | 12:15 A. M. | 1: 0 P. M. |
| MEADVILLE | 1:20 " | 2:30 " |
| CORRY | 2:45 " | 3:55 " |
| Arrives SALAMANCA | 4:58 " | 2:55 " |
| NEW YORK | 10:30 P. M. | 1:00 " |
| BOSTON | 2:30 " | 8:00 A. M. |
| PITTSBURGH | 2:20 A. M. | 3:20 P. M. |
| HARRISBURG | 1:10 P. M | 2:45 A. M. |
| PHILADELPHIA | 5:35 " | 6:55 " |
| BALTIMORE | 5:05 " | 7:00 " |
| WASHINGTON CITY | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE TO THE OIL REGIONS OF PENNSYLVANIA.

Passengers to the Eastern Cities will find the Atlantic & Great Western R'y A most Dseirable Route. The Engines, Cars, and other Equipments, are entirely New, of the most Modern, Substantial and Approved description, Unequaled by any Railway on this Continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for all Trains.

AMPLE TIME IS ALLOWED, AT ALL HOURS, FOR MEALS. No effort will be spared by the Company to render a Trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton & Dayton Railway; or at Northeast Corner of Broadway and Front Streets, and at No. 80, Fourth St., nearly opposite Post Office. Also, at any of the Principal Railroad and Steamboat Offices in the West and South-west.

E. F. FULLER, Gen'l Ticket Agent
D McLAREN, Gen'l Sup't.
J. P. SARVER, } Passenger Agents.
CHAS. COOK, }

# COUPON AND LOCAL TICKETS!

## CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

CONSECUTIVELY NUMBERED

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD.


## GOVERNMENT TRANSPORTATION.

GENERAL ORDERS No. 17.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., March 16, 1865.

1st. For the purpose of producing uniformity in the Transportation service and guarding against abuses, blank books of Transportation Orders will hereafter be issued from this office to the Chief Quartermaster of each Department, to be by him immediately furnished to each officer under his order entitled to issue the same; after the receipt of which no other form will be used, unless in emergencies when the prescribed blank form cannot be had, and then the reason for not using it must be stated in the order.

These blank orders will be numbered and registered in this office in such manner that there will never be two orders of the same number in circulation; they will be charged to the Chief Quartermaster to whom sent, who will in like manner charge and hold responsible his subordinate officers.

On exchange of posts, or on transfer to another officer, like receipts must be taken and forwarded to the Chief Quartermaster of each Department.

2d. Within five days after the end of each month, a concise report will be made to the Department Quartermaster of the number of orders issued, the number cancelled by error (which must accompany the report), and the number remaining on hand, with a statement of the amount of transportation furnished in the month; which report in a condensed form (accompanied by the orders so cancelled) will be by him immediately transmitted to the Quartermaster-General, under envelope, endorsed on margin "Rail and River Transportation."

3d. The marginal register should contain the substance of the order issued, and will be preserved by the officer issuing for his own protection, or return to the Department Quartermaster or this office, as may be hereafter required.

*Care should be taken at all times to keep on hand a sufficient supply of these blank orders*, which can be obtained upon application to the proper Senior or Department Quartermaster.

4th. Unless in extraordinary circumstances, all rail and river transportation, passenger and freight, at any post, will hereafter be under the control and management of a single officer, on whom requisitions will be made by other officers requiring transportation.

5th. When more than five persons, in one party, are to be transported over one road, or a continuous line of roads, separate orders for transportation must be issued for each road to be passed over. These orders should be received on the train instead of tickets, and are to be receipted by the party named in the order, and given up on the cars—the officers, or persons in charge, filling the receipt with the number actually carried. Five persons, or a less number, may be carried over a continuous line of roads upon a single order for transportation, and this order may be exchanged at the starting point for tickets over the entire route.

6th. Settlement should not be made nor vouchers given to railroads on orders for passenger transportation properly belonging to other roads, but the *passenger* accounts for each road should be made up separately in the name of the roads to which they belong.

7th. Appletons' Railway Guide for January, 1865, will be used as a standard for indicating routes and fixing distances, unless the actual distance is proved to be less, in which case settlement will be made on the basis of actual distance. Where this Guide cannot be more readily procured it can be furnished from this office.

8th. When a number of troops are to be transported from any point to any other point, on the same day or train, it should be done in squads as far as practicable. A single transportation order, or set of orders, should be given to the ranking officer, or most responsible person of the several detachments.

9th. Blank books of Free Transportation Orders will also be furnished, to be used on boats belonging to, or in the service of, the Quartermaster's Department, or on railroads operated by the Government. The free passes in these books will be given to persons entitled to receive Government transportation, and should not be issued without designating on the order the boat or road on or over which the person is to be transported. The marginal registers in these books will also be preserved for return to the Department Quartermaster, or to this office, as may from time to time be required.

Should the route to be traveled be in part over roads or on those owned by private parties or companies, care should be taken that Free and Pay Orders are given as the case may require, or such requisitions furnished as will enable the party entitled to transportation to procure it at points where pay transportation commences.

10th. To warrant the granting of transportation, except in cases specified by Regulations or General Orders, published for general information, the person demanding the same should show a requisition or order from competent authority requiring the movement by public conveyance the performance of public duty.

The original requisition, when not necessarily required by the officer presenting it, should be retained by the officer furnishing the transportation; in other cases, a certified copy or necessary extract from the order should be furnished to, and preserved by the officer granting transportation as his proper authority therefor, and a certified copy of the same must be endorsed on the back of the order.

11th. When the cost of transportation is to be reimbursed to the Government, as in the case of sick and furloughed soldiers, the required certificate should not only be made upon the furlough or order, but the transportation order should also be endorsed on the back substantially as follow: "The within transportation, furnished under General Order ——, and the proper officers duly notified. —— ——
A. Q. M."

12th. When transportation is granted to persons not in the military service, full explanations therefor should be given

13th. Orders for transportation should give the name of the party to be transported, or if there are several, then of the officer in person in charge, and state the number of men to be transported.

Orders for "one man," "ten men," and the like, without designating any name, are improper

14th. The receipts for transportation should be filled up in ink by the officer or person named in the order before signing, and if he cannot write his name, there should be a witness to his mark.

Names and places should be written distinctly in full, and not abbreviated.

15th. Duplicates of orders for passenger transportation should not be issued.

16th. When a requisition calls for transportation to any given point and return, the order should be issued to the place of destination, and the return transportation should be obtained at that point, provided it can there be procured.

17th. Upon the form of order now issued should be presented all the facts necessary to enable an auditing officer to decide as to the regularity or propriety of the order, so that it may be paid by any authorized disbursing officer.

18th. Erasures, interlineations, or alterations, if made against the interest of the Government, should be explained on the order by the issuing or other competent officer; otherwise, the transportation should only be settled for in accordance with the order before change or modification.

19th. Transportation by water being generally the cheapest should be selected when consistent with the interests of the service All transportation should be furnished by the shortest practicable route, unless a different route is indicated in the order which directs the movement. Where there are two or more competing routes without material difference in distance or time, the business should be divided in equitable proportion between them, the distance for which compensation is made being estimated by the shortest practicable route.

20th. In no case is subsistence furnished by the Quartermaster's Department.

21st. The good of the service requiring that railroads should obey the requisitions of officers properly authorized to demand transportation, in case compensation is made by the Government for illegal or unauthorized transportation so required, the officer making the requisition or issuing the order will be charged therewith, or if not paid by the Government, the railroad will be entitled to recourse upon such officer.

By order of the Quartermaster-General.

LEWIS B. PARSONS
*Colonel, and Chief of Rail and River Transportation.*


## The Old And Reliable Route.

**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all eastern points, with the greatest promptitude and dispatch

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.
J. J. HOUSTON, General Freight Agent.
myll Pittsburg, Pa.

## Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:0 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequaled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. myll

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

## *STEAMSHIP COMPANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

WASHINGTON..... 3,200 tuns, 900 horse-power.
LAFAYETTE ..... 3,200 tuns, 900 horse-power.
EUROPE..... 3,554 tuns, 950 horse power.
FRANCE..... (afloat), 900 horse power.
NAPOLEON III ..... ( float), 1,200 horse power.

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its equivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to

GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building) | 3,412 | —— |
| ENGLAND (now building) | 3,430 | —— |
| SCOTLAND (now building) | 3,430 | —— |
| ERIN | 3,310 | Grace. |
| HELVETIA | 3,315 | Prosse. |
| PENNSYLVANIA | 2,852 | Grogan. |
| VIRGINIA | 2,872 | Lewis. |
| LOUISIANA | 2,466 | Aspinett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to

WILLIAMS & GUION, No. 71 Wall street.

For steerage passage apply to

640* WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,

Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN | $80 00 | STEERAGE | $30 00 |
| First Cabin to London | 95 00 | Steerage to London | 34 00 |
| First Cabin to Paris | 105 00 | Steerage to Paris | 40 00 |
| First Cabin to Hamburg | 100 00 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR ..... 2,595 6-95 tuns.
WILLIAM R. BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Havre, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to

640* JAMES A. RAYNOR, No. 10 Barclay street.

## CENTRAL RAILROAD

—OF—

## NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6:30 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Easton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:0 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:0 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg etc.

4 p. m.—For Easton, Scranton Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:00 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twedty Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 5:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m; 3:15; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:5; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:5 p. m. to Northampton.

For Housatonic Railroad, 8:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

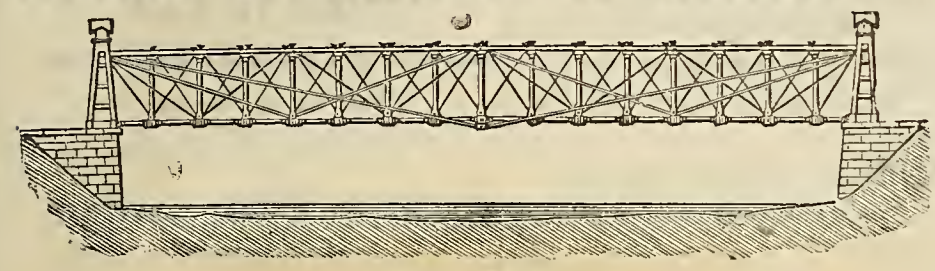
JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '63. 1y. Letter Box, 1393. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27-1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y

---

## KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA.

---

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

## FINDINGS

—AND—

## MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS

Either Single or Double Plate,

With or Without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

## Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

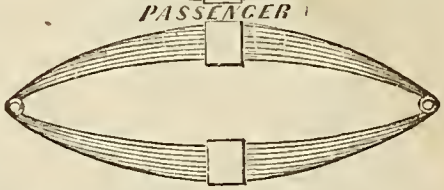
RAILWAY SPRINGS.

**FREIGHT**

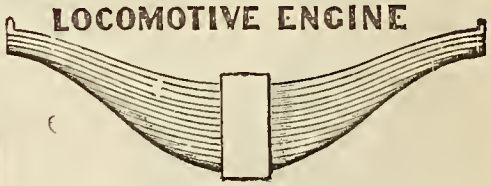




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

ELLIPTIC AND SEMI-ELLIPTIC

## SPRINGS.

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commisson only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

Tbis great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by a running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged oy way of Harrisburg.*

This is the ONLY ROUTE by which passengers can pro cure *through tickets and through checks to* WASHING TON CITY.

W P. SMITH, *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes Ag't. Bellaire, O.*
L M COLE, *Gen. Ticket Agent. Baltimore.*

## Little Miami and Columbus & Xenia Railroads

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M. |

☞ Sle ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M. |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M. |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Bur net House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Obuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Louisville, St. Louis and Cairo Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:0 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

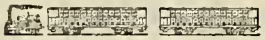
Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞ Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent.

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis. at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago. connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra. St. Joseph, Atchison, K. T at 7:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtaine at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, C ncinnati Agent.

## MOSELEY'S

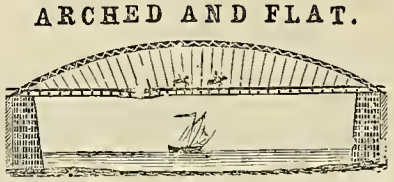
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2. MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

THE SCHENECTADY

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State. possess superior facili es for forwarding the r work to any part of the country w thout delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—¾ to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!!**



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞ Through connections made for all points East a Wes

WM. HARNS Supt

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. - - } Editors

CINCINNATI:
THURSDAY, AUGUST 17, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

**SUBSCRIPTIONS—$3 Per Annum, in Advance.**

**ADVERTISEMENTS.**

square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| Morrow Accommodation | 5:20 P. M. | 7:45 A. M. |
| *Atlantic & Great Western—* | | |
| Morning Express | 9:40 A. M. | 7:20 A. M. |
| Night Express | 10:50 P. M. | 6:30 P. M |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:20 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Toledo, Detroit and Huntsville | 6:00 P. M. | 12:50 P. M |
| Richmond and Chicago | 6:00 P. M. | 12:25 A. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | | 7:55 A. M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M. |
| Indianapolis & Cambridge City | 6:00 A. M. | 10:05 P. M |
| " " " | 4:00 P. M. | 12:25 P. M |
| Eastern Night Express | 10:50 P. M. | 7:50 A. M |
| Mail and Express | 9:40 A. M. | 6:30 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Springfield and St. Joe Express | 1:00 P. M. | 5:07 P. M. |
| St. Louis and Chicago Express | 10:00 P. M. | 5:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 5:15 P. M. | 8:20 A. M. |
| Harrison Accommodation | 9:30 A. M. | 8:40 P. M. |
| Chicago and St. Louis Express | 7:15 A. M. | 9:00 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 6:00 A. M. | 10:00 P. M. |
| Connersville, Cambridge City & Indianapolis Express | 4:00 P. M. | 12:25 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 0:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 7:45 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:12 P. M. |
| Evening Express | 2:35 P. M. | 6:00 A. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapoli & Cincinnati Roads, are run by Vincennes me which is 12 minutes slower than Cincinnati time.

## THE THREE GREAT TELEGRAPHIC ROUTES TO EUROPE.

Those who are now talking so much of laying the Great Atlantic Cable, and so deeply interested in it, do not seem to remember that our hopes of a direct telegraphic communication with Europe do not rest altogether, nor chiefly, on the Atlantic cable. In fact, the Atlantic cable is attended with difficulties which do not attend the others. There are, in fact, at this time, *three* great telegraphic enterprises on foot, in which the main object is to connect the United States with Europe; viz., one directly across the Atlantic; another through Greenland; a third, through Russia. All of these are undertaken at the present time, and we shall briefly notice each route.

1. It is natural that almost any one should look first to the direct and short route, from New York to Liverpool (or near that), which is the one constantly used by our packet steamers. This is the shortest. It is the one which connects the great bankers and merchants, and will best serve the purposes of commerce and speculation. Hence, the greatest energy, and skill, and capital are employed to complete a direct line from the seaports of the United States to those of Great Britain. But it may prove in the end that, in this, as in many other cases, "the longest way round is the shortest way home." There are difficulties in the Atlantic cable which do not attend the others. Before this article reaches our readers, the fate of the Atlantic cable will probably be determined; but its utmost success at present will not determine its ultimate results; here are some of the difficulties. 1. Say what we may, every mile of additional length under water increases the danger of failure. It makes the cable liable to increased dangers in the ocean, and who can tell what they are. 2. If there be any defect or break in the cable, in the ocean, how is it to be remedied? To take up the whole line, even if possible, can scarcely be done except in the calmest season of the year; and in any event must be attended with great delays. 3. The Atlantic between Europe and America is very deep in some places (as we know by soundings) with a rough and rocky bottom at others. The rocky precipices near the coast of Europe present at all times great dangers to the sunk cable, from wearing and cutting on the rocks. It is probable, the first Atlantic cable was broke in this way. We see, therefore, that if the Atlantic telegraphic wire was successful in being laid, there is no probability that it will long remain in use, with bad, if not fatal accidents. It is one of those things, in which success must be accidental, and failure probable. So great, however, are the chances of profit, that, till the thing is proved impossible, capital will always be found to undertake it.

2. The next scheme is that of the Greenland route. A gentleman, whose name we have forgotten, highly distinguished as an American telegrapher, was many years since convinced that an Atlantic telegraph would not succeed, and that the only successful route would be that from Denmark, through Greenland. For this purpose, he several years since visited Greenland, Denmark, and Norway, and satisfied himself that his theory was correct. He then proceeded to get, from different governments the necessary authority. This route would be from Denmark to Iceland, Greenland, and British America. The whole line will be in round numbers 5,000 miles. That from London to New York 3,000 miles. The Greenland route would be 2,000 miles longer than the English route; but observe, on the other hand, no one *water line* is more than half that across the Atlantic. The chances of under-ocean accidents are, therefore, diminished one half. The difficulties of laying the cable are diminished more than half. The ease of repairing any defect or break in the ocean wire is vastly increased. In fine, the cost of laying it is greatly diminished, and the chances of success increased. On the other hand, we must think, that great danger to a Greenland under-water line must occur from icebergs and other northern elements. Icebergs sink deep into the ocean, and go wherever they can float. If one should float toward the coast and strike bottom, where the telegraphic cable was, would not the latter be destroyed? All along those coasts, icebergs do come, and frequently strand on the shore. Notwithstanding this danger, we believe the Greenland route better than that of the Atlantic, and if the latter is successful, and charges the high rates proposed, there is no doubt the former will make a very profitable speculation.

3. But, in our opinion, the most promising plan is that through Russia. Our readers may recollect that some years since, our countryman, Mr. Collins, accredited by the Government, in some consular position, traversed Russia, from Moscow to the valley of the Amoor, with a view to the probabilities of such an enterprise. His published travels are remarkably interesting. He ascertained that the route was practicable, and that it would receive the authority and assistance of the Russian government. Mr. Collins has returned to Russia, and is now, we believe, on the Russian coast, assisted by the Russian government, carrying on this enterprise, in our view one of the most important ever undertaken. Mr. Collins has all necessary authorities, has carried out a skillful engineer and workmen, has obtained capital, and has the powerful aid of the Emperor of Russia, through whose dominions two-thirds of the line will lie. The great advantage of this route is, that no part of the water line will be more than one-sixth that of the Atlantic cable, or one-third

that of Greenland; while the land line, although passing through such an immense country, is capable of being fully protected on every mile. The relative length and water distance on these routes are as follows, viz.:

| | Whole length. | Longest water line. |
|---|---|---|
| Russian route | 9,000 miles. | 500 miles. |
| Greenland " | 5,000 " | 1,200 " |
| Atlantic " | 3,000 " | 2,200 " |

Now, the Russian route is entirely practicable and safe, and so easily put down and repaired, that it must necessarily be the cheapest. The last is unsafe, if not impracticable, and must ever be the dearest. It is true, that there will probably be on the Russian route four points, in which the messages must be transferred. But, that will occasion but a short delay. On the whole we think the Russian route the most likely to be successful.

## STATISTICS OF HOGS IN U. STATES.

One of the most profitable cash products in the United States is the *hog*, and the various manufactured articles made from him. There are in the country about 32,000,000 hogs; and of these at least 10,000,000 are slaughtered each year, which, with the labor, and other articles added in the manufacture, produce a cash value per annum of *one hundred millions of dollars.* The following statistics are from the census.

SWINE.

There were in the States and Territories 30,354,213 swine, in 1850; 33,512,867 in 1860; showing an increase of over 3,000,000.

The following table shows the number of swine in the New England States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| Connecticut | 75,120 | 76,472 |
| Massachusetts | 73,948 | 81,119 |
| Maine | 54,783 | 54,988 |
| New Hampshire | 51,935 | 63,487 |
| Rhode Island | 17,478 | 19,409 |
| Vermont | 52,912 | 66,296 |
| Total | 326,176 | 361,481 |

There were in the New England States in 1850, 361,481 swine, and in 1860, 326,176, showing a decrease of 35,310 head.

There has been a decrease in all the New England States except Maine, where there is an increase of about two hundred.

| | 1860. | 7850. |
|---|---|---|
| New York | 910,178 | 1,018,252 |
| New Jersey | 236,089 | 250,370 |
| Pennsylvania | 1,031,266 | 1,040,366 |
| Delaware | 47,848 | 56,261 |
| Maryland | 387,756 | 352,911 |
| District of Columbia | 1,099 | 1,635 |
| Total | 2,614,236 | 2,710,795 |

There were 2,719795 swine in the middle States in 1850, and 2,614,236 in 1860; a decrease of over 105,000 head. There is a slight increase in Maryland; all the other States have decreased. In New York alone there is a decrease of over 100,000 head. Pennsylvania has more swine than any other middle State.

The following table shows the number of swin the western States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| Illinois | 2,502,308 | 1,915,907 |
| Indiana | 3,099,110 | 2,263,776 |
| Iowa | 934,820 | 323,247 |
| Kansas | 138,224 | ..... |
| Kentucky | 2,330,595 | 2,891,163 |
| Missouri | 2,345,425 | 1,702,625 |
| Michigan | 372,386 | 205,847 |
| Minnesota | 101,371 | 734 |
| Ohio | 2,251,653 | 1,964,770 |
| Wisconsin | 334,055 | 159,276 |
| Nebraska | 25,369 | ..... |
| Total | 14,435,316 | 11,427,345 |

There were in the western States 11,427,345 swine in 1850, and in 1860, 14,435,330; showing an increase of over three millions.

There has been an increase in every western State except Kentucky, in which State there has been a falling off in the number of swine of over half a million.

Indiana has more swine than any other State in the west, or, in fact, of the United States, having 3,099,110, against 2,263,775 in 1850.

Illinois stands next, having 2,502,308 head in 1860, against 1,915,907 in 1850; an increase of over half a million.

Missouri stands next, having 2,345,425, against 1,702,625 in 1850; showing an increase of nearly forty per cent.

Kentucky had more swine in 1850 than any other western State, and more than any other in the United States except Tennessee. She has now, however, about 15,000 less than Missouri.

Iowa shows a remarkable increase in the number of swine, having 323,247 in 1850, and 934,820 in 1820; an increase of nearly 200 per cent.

Minnesota has increased from 784 in 1850, to 101,371 in 1860; an increase of 100,000.

The following table shows the number of swine in the southern States iu 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| Alabama | 1,847,321 | 1,904,540 |
| Arkansas | 1,171,630 | 836,727 |
| Florida | 271,742 | 209,453 |
| Georgia | 2,036,116 | 2,168,617 |
| Louisiana | 634,525 | 597,301 |
| Mississippi | 1,532,768 | 1,582,734 |
| North Carolina | 1,883,214 | 1,812,813 |
| South Carolina | 965,779 | 1,065,503 |
| Tennessee | 2,347321 | 3,104,800 |
| Texas | 1,371,532 | 692,022 |
| Virginia | 1,599,919 | 1,829,843 |
| Total | 16,562,867 | 15,804,353 |

There were in the southern States in 1850, 15,804,353 swine; and in 1860, 15,562,867; showing a decrease of nearly 250,000 head.

## "THE NARROW GAUGE."

An Urbana paper says that the New York Central has made (or will make) a new through line to Cincinnati, to he called the "Narrow Gauge" line; in opposition, we presnme, to the "Broad Gauge" line, made by the Great Western and the Dayton lines.

The Narrow Gauge is to be composed as follows:

| | Miles. |
|---|---|
| Cleveland and Sandusky (Lake Shore Line) | 60 |
| Sandusky and Dayton (Mad River Line) | 153 |
| Dayton "Air Line" | 52 |
| Total | 265 |

We don't know how true this is; but presume there is something in it; for there is no question the route of the Great Western and Atlantic will interfere very much with the business of the New York Central. It gives the Erie road decidedly the advantage. On the other hand, the Cleveland and Colnmbns route affords a ready and available outlet to the Ohio for the "Central." The distance by this route is as follows:

| | Miles. |
|---|---|
| Cleveland to Colnmbus | 135 |
| Columbus to Cincinnati | 120 |
| Total | 255 |

This is shorter than the one above, but there is no doubt the "air line" (or tunnel) enterance into Cincinnati will give, whatever road first takes it, a great advantage. No enterence into Cincinnati is at all equal to that should it ever be completed. If this scheme is a reality, its great feature will be the completion of the tunnel, and we have no doubt it is both practicable and desirable.

## RAILROAD DECISIONS.

### THE CONNELLSVILLE RAILROAD.

AN IMPORTANT OPINION.

Below will be found the opinion of the Circuit Court of the United States, for the Western District of Pennsylvania, written by Judge Grier, of the Supreme Court, and delivered by his colleague, Judge McCandless, in the case of the city of Baltimore against the Connellsville and Southern Pennsylvania Railroad Company, argued lately at Williamsport, Pennsylvania. It will be seen that the judgment of the Court upon the *law* of the case is, to the fullest extent, in favor of the complainant. The defendant is, indeed, allowed a limited time to file an answer, and prove, if he can, that the pretended "misuse or abuse" of the privileges of the Connellsville charter, the averment of which was the pretext for passing the act intended to repeal it, had really taken place. As proof of this is *impossible*, it being flatly contradicted by the concurrent acts of the Legislature itself, and having, moreover, no foundation in fact, the friends of the Connellsville road feel assured in ultimate success, even should vexatious litigation produce some delay in the completion of the work. The city of Baltimnre became, at the instance of the Connellsville Company

the complainant in the case for the protection of her own rights as a creditor, which are dependent upon the preservation of the company's charter, not only for the ultimate return of her loan, but for the vast commercial advantages which can be secured to her only by the construction of the road to Cumberland.

A Federal Court was evidently the proper tribunal to decide a question on which depended the establishment, at this epoch above all others, of a *national policy, commercially* ignoring State lines and proclaiming free trade between all sections of common country, instead of erecting those political boundaries into barriers to confine our interual commerce within the narrow limits of State territories. The recent course of Pennsylvania legislation on this subject, directed, as it notoriously has been, by the Pennsylvania Railroad Company, and in diametrical opposition to the enlarged views of that great Commonwealth, when, in 1828, she chartered the Baltimore and Ohio Railroad Company, has tended wholly to this selfish result, incompatible as it is with the first principles of our federated system The *Courts* of the United States have therefore been continually invoked for the purpose of sustaining that original legislation of Pennsylvania herself, which conferred rights not to be causelessly revoked. Hence the case is entirely different from an appeal to *Congress* to exercise a doubtful power to legislate upon subjects more properly belonging to State legislation.

Western Pennsylvania and the whole Northwest beyond want a free route through Pittsburg *direct* to Baltimore, their nearest seaport and to Washington, the seat of our National Government, but the Penusylvania Railroad Company calls upon the Legislative power of Pennsylvania to refuse it, and to insist upoo the eoneentration of western trade in Philadelphia and a eompulsory passage through Harrishurg of all western travel to and from Washington by a route seventy miles longer than that via Cumberland. The interest of Baltimore in the success of the Connellsville Company in maintaining its eharter can not be overrated, although the establishment of our communications with the Great West through our lines to Wheeling and Parkersburg have led us to attach less importanee than formerly to our connection with Pittsburg. It is well for us that the Baltimore and Ohio Railroad, designed originally to go to Pittsburg, has become with the entire good will and approval of that city ths chief stockholder in the Connellsville road, and that its sagacious and energetie head is determined to press it to that terminus as soon as the existing diffieulties created by an unscrupplous rival and enemy to Baltimore and her eommereial interests, may he removed.

### THE CONNELLSVILLE RAILROAD CASE—OPINION OF THE COURT.

[From the Pittsburg Evening Chronicle.]

This morning His Honor Judge McCandless, in the United States Circuit Court, read the following opinion of Judge Grier, in the ease of the Mayor, &c., of Baltimore *vs* the Connellsville and Southern Pennsylvania Railroad. The case was argued at Williamsport on the 20th of June last, by J. H. B. Latrobe, Esq., and Hon. Reverdy Johnston on the part of the city of Baltimore, and Judge Walter H. Lowrie and G. F. Hamilton, Esq., for the Southern Pennsylvania Railroad.

### OPINION OF THE COURT.

The single question for decision in this case is eorreetly stated in the argument of the learned counsel, for the respondent, as follows:

The charter of the Pittsburgh and Connellsville Railroad Company contains the following provisions, viz: "If said Company shall at any time misuse or abuse any of the privileges herein granted, the Legislature may resume all and singular the rights and privileges hereby granted, to such corporation."

Under this clause the Legislature, hy an act passed in 1864, revoked and resumed all and singular the rights and privileges grauted to said Company, so far as the same authorized it to construct any line or lines of railway southwardly or eastwardly from Connellsville.

Is this repealing act repugnant to the Constitution of the United States, on the ground that it impairs the obligation of the contract between the State and the company?

The objections made on the argument to the form of the pleadings and the right of the complainant to have the remedy sought in his bill, will be found overruled in a similar case by the Supreme Court. We refer to the case of Dodge *vs* Wolsey, 18th Howard, 335. In that case the complainaot was a stockholder in the corporation, whose interests were likely to be injuriously affected by the State legislation, if it should be carried into effect. In this case the complainant is a creditor, who, on the faith of legislative acts, granting certain franchises and privileges to the Pittsburg and Connellsville Railroad Company, has advanced large sums of money which have been expended in constructing their road. If that corporation submit to this act of Legislature, divesting them of the most valuable part of their franchises, the security and rights of the complainant would be materially injured. The bill is in the nature of a bill *quia temet*, and the eomplainant has a right to the remedy sought, if the Court should be of opinion that the act of 1864 impairs the obligation of the original contract, or aet of incorporation granted to the Pittsburg and Connellsville Railroad Company.

The only question then is as to the validity of this act. That the act repealing the franchises of the corporation, or material part, and transferring its franchises and property to another corporation without its consent, impairs the obligation of the original eontract, is not and can not be denied. Nor is it denied that an act granting eorporate privileges to a body of men who have proceeded on the faith of it to subscribe stock and horrow money, and expend it in the construction of a valuable public improvement, is a eontract, and that it is not in the power of either party to it to repudiate or annul it without the consent of the other.

The State claims no sovereign power to repudiate its contracts or defraud its citizens, and the Constitution delegates no such power to the Legislature.

If in the act of incorporation the Legislature retains the *obsolute and unconditional* power of revocation for *any or no reasons;* if it be so written in the hond, the party accepting a franchise on such conditions can not complain if it be arbitrarily revoked; or if this contract be that this Legislature may repeal the act *whenever in its opinion* the corporation has misused or ahused its privileges, then the contract eonstitutes the Legislature the arbiter and judge of the existance of that fact.

But the case before us comes within another category. The contract does not give an unconditional right to the Legislature to repudiate its eontraet. Nor is the Legislature constituted the trihunal to adjudge tbe question of fact as to the misuse or ahuse. Moreover, the case before us admits that the condition of facts upon which the Legislature are authorized to repeal the act, does not exist. It admits that the corporation has neither "misused or abused its privileges." A charter may be vacated hy the decree of n judical tribunal in proper proceeding for that purpose without any such reservation in the act. Then both parties are heard and a verdict of a jury on the facts can be ohtained, which concludes the question. But the Legislature possesses no judical authority under the constitution, nnd has no established course of proceedings in the exercise of such power.

The party who is injured by its action is not heard. The reasons usually alleged in the preamble to such acts are the mere suggestions of some interested party, seeking to speculate at the expense of others—professional solicitors who infest the lobby are ever ready for a sufficient consideration, to impose on the good nature of honest hut often careless legislators, hy the suggestion of any necessary falsehood.

If any one should feel curious as to the methods used by agents of corporations to obtain such legislative acts, as may be desirable, they will find them fully exposed in the opinion of the Supreme Court, delivered in the care of Marshall *vs.* the Baltimore & Ohio Railroad Company, 16th Howord, 338.

We do not intend even to insinuate that any such *seeret services* by "*skillful and unscrupulous agents stimulated to active partisanship by the strong lure of high profits,*" to use "*most efficient means*" to get the vote "*of the careless mass of legislators*" have been used in this case. But we do say that the recitals in the preamble to this act exhihit a labored attempt to justify a more than doubtful exercise of power hy an array of reasons which, even if true in fact, might be demurred to in law as insufficient.

The act does not eontemplate the exercise of the right of eminent domain hy which the property ot individuals or corporations may be taken for some public use on making ample compensation. Its ohjcct is to transfer the franchises and property of one corporation, anxious by every means in its power to complete a valuable public improvement, to another whose interest it is *not* to complete the road, and who are not required to do so at any time in this or the next century.

Where in a case like the present the Legislature are asked to take the property of one corporation and give it up to another, on the ground that one has misused or abused its privileges, the just and proper mode would he to pass a resolution ordering the Attorney General to institute the proper legal proceedings to ascertain the fact of "misuse or abuse." If such issue be found true then that the charter be revoked or resumed. We do not say that without such judical proceeding ascertaining the existence or connition in which the right of repeal is reserved, the act is absolutely void; *but we do say* that in all such cases the party injured, if he denies the existence of such "misuse or abuse" has a right to be heard, and to have that question tried before he shall surrender his property or his franchise. We do not think it necessary to notice the nqmerous and conflicting cases which have heen brought to our notiee by the learned counsel.

In the case of the Erie and Northeast Railroad *vs.* Casey, 26th Pennsylvania and 1st Grant, the Court found after a full hearing of

the parties, that the fact of "misuse or abuse" *did exist*, and therefore the act was not void.

It can not, therefore, be any precedent for a case which admits that such facts do not exist. The principles of law, so far as they effect this case, are very clearly and tersely stated by Chief Justice Lewis in his opinion, to be found in 1st Grant, 275, with a review of the cases and a proper appreciation of that from Iowa.

The sum of the whole matter is this:

1. The complainant has shown a proper case for the interference of the Court in his favor.

2. That the act complained of is unconstitutional and void under the admissions of the case.

3. The complainant is entitled to the decree of the court on the pleadings as they stand.

4. That the defendants have leave to withdraw their demurrer and answer over; and if they shall so request, an issue will be ordered to try whether the Pittsburg and Connellsville Railroad have misused or abused iheir charter.

I am authorized to say my brother McCandless fully concurs in this opinion.

Bill dismissed as to the Governor, as his acts can do neither harm nor good to either party. Respondents have thirty days to file answer and request issue. If not done in that time final decree according to the prayer of the bill. Per curiam.

R. C. GRIER.

---

MISSISSIPPI & MISSOURI R. R.—The financial condition of this company is reported as follows:

| | |
|---|---|
| Land grant mortgage | $3,612,000 |
| Accrued interest to July 1 | 162,914 |
| Prior mortgage and interest on First Division | 1,672,490 |
| Second land grant | 691,000 |
| Oscaloosa first mortgage | 688,506 |
| Income bonds | 253,309 |
| Overdue coupons, etc | 64,992 |
| Total | $7,145,252 |
| Other liabilities | 118,000 |
| Capital stock | 3,452,300 |
| Total present cost | $10,715,552 |

The gross traffic of the road in 1864 was $403,902; for five months of 1865, $282,498. No sales of lands from the original government grant have yet been reported. About a million of dollars on the land grant mortgage bonds are in pledge to the Chicago and Rock Island Company as security for the advance of $500,000 to the road.—*Western Railroad Gazette.*

---

SOUTHERN PACIFIC R. R.—A correspondent of the New Orleans *Times*, writing from Shreveport, the 17th, says: "A committee of the board of directors of the Southern Pacific Railroad Company arrived in this city yesterday, to see General Veatch commanding the northern division of Louisiana, in regard to the completion of the railroad between this place and Marshall, Texas, there being a gap of eleven miles to complete it. This part of the road is graded, and only needs laying the iron to make the connection complete; and, with the assistance of the government, it can be done in thirty days, thus opening means of transportation for the large amount of cotton and other resources of northern Texas to this market."

## THE ATLANTIC TELEGRAPH.

At the present time, the laying of the Atlantic Telegraph is a subject of great interest; and we extract from "Hunt's Merchants' Magazine" some account of the machinery and mode of laying, tests, &c.

### THIRD EXPEDITION, AND ITS FAILURE.

On the 28th they met, and on the 29th at 1 P. M., the splice was made, and the vessels started for their respective destinations. On the 4th of August *the cable was laid*, and the Old World and the New were in telegraphic communication with one another. But the communication was not continuous, nor had it been. On the 29th of July, at 7.45 P. M., the signals along ths wire ceased. At 9.10 they again resumed. Upon the landing of the cable, the continuity was again found to be disturbed. The wires were at first worked with the Ruhmkorff induction coils and a Smee's battery, and afterward with a Daniell battery; but the current was for the most part so weak as scarcely to work the most delicate relay, susceptible to an impulse that can hardly be perceived on the tongue. The effect was indicated at the Newfouudland station hy the reflection of a delicate galvanometer, and at Valentia, in Ireland, by that of the reflecting galvanometer of Professor William Thompson, the effect of which is to multiply the movement in a ray of light reflected from a mirror attached to a very delicate magnetic needle. This ray being thrown upon a surfacc at some distance, a movement of the needle, which is otherwise imperceptible, may he eveu measured upon a graduated scale. The transmitted current was so weak during much of the time that the cable continued in action, that every expedient of this kind was necessary to render the signals perceptible. From the first there appears to have been a defect in the part of the cable laid hy the *Niagara*, which defect was noticed on the day after starting; and it is generally believed that the very imperfect signals which followed the landing of the cable, and lasted until the 20th of Octoher following, were attributahle to this original defect. Between these two dates 129 messages were sent from Valentia to Newfouudland, and 271 in the other direction. The number of words in the former direction was 1,474, and in the latter 2,885. The first message was from Queen Victoria to President Buchanan; and the last intelligihle signal was: "Two hundred and forty t——k——Daniells now in ciruit." It afterwards appeared that the complete message was: "Two hundred and forty trays and seventy-two liquid Daniells now in circuit.' This indicated the enormous electrical power which was used to force through the now dislocated wire the last dying throhs it was destined to transmit. The power thus employed was over a thousand times what would have been required, even at that time, in an ordinarily well insulated conductor to give perfect signals to the mirror-galvanometer. The hopelessness of endeavoring to work the line was but too plain; and it was accordingly ahandoned after as much of the shore ends were recovered as possihle.

### THE COST.

The cost of the Atlantic cable was as follows: for 2,500 miles, at $485 per mile, $1,212,500; for 10 miles, at $1,250 per mile, $12,500; and for 25 miles of shore ends, at same price, $31 250; makiog altogether $1,256,250. Up to December 1, 1858, the expenditures of the company had amounted to $1,834,500.

### THE PRESENT EXPEDITION—THE FOURTH.

The company having resolved not to give up the enterprise, at once took steps to carry it to a successful termination. New capital was raised, a new cable made, new privileges were obtained, and the *Great Eastern* chartered to lay the cable. But they now embark upon their great mission under very altered circumstances. Since 1858, submarine telegraphy has taken great strides. Previous to that period hut 945 miles of insulated wire had been laid, as follows:

| | | Miles. |
|---|---|---|
| 1854. | Sweden to Denmark | 36 |
| 1854. | Italy to Corsica | 660 |
| 1854. | Corsica to Sardinia | 60 |
| 1855. | Egypt | 40 |
| 1856. | Newfoundland to Cape Breton | 85 |
| 1856. | Prince Edward's Island to New Brunswick | 12 |
| 1857. | Norway, across Fiords | 49 |
| 1857. | Across mouths of Danuhe | 3 |
| | Total | 945 |

But since then over 6,000 miles of submarine telegraph have been successfully laid down and worked, as follows:

| | | Miles. |
|---|---|---|
| 1858. | England to Holland | 560 |
| 1858. | England to Hanover | 560 |
| 1858. | Norway, across Fiords | 15 |
| 1859. | Alexandria | 8 |
| 1859. | England to Denmark | 1,050 |
| 1859. | Sweden to Gottland | 64 |
| 1859. | Folkstone to Boulogne | 144 |
| 1859. | Liverpool to Holyhead | 50 |
| 1859. | Across rivers in India | 10 |
| 1859. | Malta to Sicily | 60 |
| 1859. | England to Isle of Man | 36 |
| 1860. | Jersey to Pirou, France | 21 |
| 1860. | France to Algiers | 560 |
| 1860. | Corfu to Otranto | 80 |
| 1861. | Toulon to Corsica | 60 |
| 1861. | Malta to Alexandria | 1,518 |
| ... | Other lines since | 2,000 |
| | Total | 6,757 |

The peculiar condition of insulated wires has been closely observed, and many improvements have taken place in the instruments used for telegraphing and for determining force of currents, &c. Beyond all, the grand generalization of Herhert Spencer on the nature of electricity sets at rest a theory which, although it had agitated the minds of scientific men for some time past, had not until lately found an exponent of sufficient genius to impress upon it the stamp of genuineness and truth. That theory is in effect, that in the transmission of intelligence along a wire by the aid of electricity, it is not the flow of the electric current, as it is called, which conveys the message, but the impulse given to the molecules of iron composing the wire. In other words, no current of electricity passes along the wire; but a shock or impulse is experienced by the first molecule and transmitted instantaneously to all the succeeding ones, and thus at one end is repeated the signal which was made at the other. In the same manner the shock experienced at one end of a log, when it is struck by a simple hlow at the other end, may he the means of conveying a signal, albeit nothing actually passes along the log.

But this is not all. We have learnt many things of importance in telegraphy besides this, which, unlike the great theory on hand already mentioned, have passed into the domain of accepted and practical truths. Since the first Atlantic line was laid, the advance that has been made by the scientific world towards comprehending electrical phenomena is very great. Electric science has passed, since that time, from its childhood to its maturity. So far as the phenomena connected with long electric circuits were concerned, we had in 1858 no knowledge whatever. The instruments in common use were unsuited to receiving sig-

nals through a great length of cable; the necessity of providing for the conductor an insulation so perfect as to approach an absolute condition was inadequately appreciated. The best preliminary test for a long cable had not been devised, and the old Atlantic telegraph was laid without having been subjected to any searching test on shore Everybody had advice to give concerning the management of the wire, but no one recommended the precautions which subsequent experience has shown to be necessary. When the signals began to fail the battery power was augmented, and electro-magnetic induction coils, which rapidly helped on the destruction of the coudnctor, were put in circuit. No one thought of "nursing" the cable — of humoring its feeble attempts at articulate utterance, and of finding out what it said, rather by listening acutely, than by constantly calling on it to "Speak up!" The old cable, however, is dead and gone; part of it has been picked up and applied to ignoble uses, and part of it—the greater part—has been abandoned, and lies where it may rest until the end of time.

### THE NEW ATLANTIC CABLE.

The new Atlantic cable now lies on board the *Great Eastern*. A late letter thus describes the appearance of the big ship:

### SCENES ON BOARD THE GREAT EASTERN.

The *Great Eastern* looks just now more like an engineer's workshop than a sea-going vessel. The vast expanses of her deck are covered with wooden sheds and piles of timber. There are smiths' forges below, and between the decks you might fancy yourself in a machinist's factory. The great engines of the ship, it is true, have lost the bright look of machinery which is in constant use; and the huge dull masses of iron seem asleep, or in a trance. If you descend the ladders which lead to the boilers and furnaces—an expedition which is more like going down a mine than any other to which it can be compared—you find yourself in the midst of darkness, solitude and cold; but in those regions of the vessel where the cable is being shipped and watched, there is every sign of keen, vigilant intelligence. When you understand what is being done, you see something more than this—that scientific foresight of the highest order directs every step; and that the thick tarry rope, coarse and rough to appearance, which lies coiled away under water in the tanks of the ship, is manufactured, scanned and tested with as much care as the nicest optical instrument in an astronomer's observatory, or the most delicate apparatus of fragile glass ever applied to the careful experiments of chemistry.

### THE SCIENTIFIC TESTS.

It seems impossible that there can be any fault in the Atlantic cable when the *Great Eastern* goes to sea. To say nothing of the tests applied to it at the manufactory, it is tested not alone after it has been taken on board, but during its delivery into the ship. As soon as a length is brought alongside, one end is connected with the coils already on board, and the other end with the instruments in the testing room. The circuit is thus made through the whole extent of the coil, the portion on board and the portion alongside. The process of hauling in then commences, and the insulation is continuously observed. The instruments in the testing room record the smallest deviation from absolutely perfect insulation.

Indeed, from first to last, it has been subjected to a series of the most searching electrical tests, the standard of insulation being fixed at a resistance, per nautical mile, equal to 150,000,000 of Siemen's units, at a temperature of 75 degrees—a standard wholly unprecedented in any former work of the kind. In actual practice these tests, great as they were, have been considerably exceeded, and the present Atlantic cable has come out successfully from a series of trials of the most critical character. It will be understood that an insulation which shall be quite perfect as an electrician understands the word, is not attainable. A piece of metal separated by means of the purest glass, and enclosed in the driest atmosphere that can be obtained, will, if charged with electricity, lose that electricity after a time. In speaking of insulation we must therefore be understood to mean an approximate condition; but the approximation in the case of the new Atlantic cable comes so near perfection that this rough tarry rope is a scientific wonder.

The last dying pulsation of the old Atlantic cable was forced through it by means of a galvanic battery consisting of two hundred and forty cells. The submarine telegraph from London to Amsterdam is habitually worked with a battery of fifty cells, and such a battery is commonly used for the other submarine lines of Europe. Signals have been repeatedly sent through more than thirteen hundred miles of the cable now on board the *Great Eastern* by means of one cell. Galvanic currents so feeble that they could not have been felt by the hand, and might have been passed harmlessly through a circuit completed by the operator's tongue, can be used to convey messages along a length of cable that would very nearly stretch from London to St. Petersburgh. Over needle instruments, such as those in ordinary use for land telegraphy, a current from one cell would be powerless.

To record such faint pulsations of electricity it is necessary to use Professor Thompson's mirror galvanometer. This beautiful instrument consists of a mirror about the size of a fourpenny piece, made of microscope glass, and so thin that it weighs only a grain. On the back of this mirror a minute magnet is fixed, and thus supplemented it is suspended by a silken fibre in the heart of a coil of wire, so that any current passing through the coil deflects the magnet and the mirror along with it. A ray of light reflected by the mirror falls on a scale, distant about eighteen or twenty inches, and reveals its faintest movements. Different combinations of these movements represent the different letters of the alphabet, and thus the apparently erratic wanderings of a ray of light are made to convey intelligence. An instrument of this kind is constantly used to test the cable, as it is hauled on board; and if any fault had existed it could not have passed without detection. Up to this time no fault has been discovered.

Another of the tests employed was soaking separately each joint of the gutta percha covering for twenty-four hours in warm water, previous to passing the electric current through. A third, and perhaps the most trying and continuous test, was that of allowing no part of the cable to be out of the water, except merely while *in transitu* from one reservoir to the other; and in connection with this it may be mentioned that the wrapping of jute yarn, which forms the padding, around which the external wires are spun, instead of being soaked in tar, as in other cables, which has the effect of temporarily stopping up and concealing minute flaws, has simply been tanned to preserve it from decay, thus admitting the water to search out every part of the cable, and keep it, in fact, constantly surrounded with a wrapping of wet yarn.

### THE PAYING-OUT MACHINE.

This beautiful machine is an improved and extended copy, as far as general principle is concerned, of that used on board the *Agamemnon* during the first memorable attempts. Its improvements and modifications, however, are very great. Though stronger and much larger, it is very much lighter, being almost entirely of wrought iron. It has six leading wheels, round which the cable passes in deep grooves, before which it will be finally submerged. Each groove in these six wheels is surmounted by what is termed a jockey-pulley—that is to say, a solid wheel, which keeps the rope down in the groove, and prevents it over-riding or getting out of place. The main drum is about seven feet in diameter, and in paying-out will have three coils of cable round it, with a guiding piece of wrought iron pressing on them sideways to keep them compactly together. As the friction on the guider is great and constant, a duplicate is provided in case of heating, which can be put in gear, with the rest of the machinery without the slightest stop on any part. A second drum has also been fitted, in case of anything going wrong with the first. Each of these drums is fitted with a distinct set of simple and most ingenious brakes, invented by Mr. Appold for the first expedition. The ordinary condition of these brakes is to maintain a sufficient check upon the drum to keep a strain of say 30 cwt. or 40 cwt. upon the ropes going out, but it constantly happens that a sudden rise of the ship's stern from a wave, gives the cable a strain that requires the instant removal of the brakes to relieve it. This is accomplished by a dynameter placed on the cable after it leaves the paying-out machine and before it passes over the wheel astern into the Atlantic. This dynameter is only a heavy wheel resting on the rope, but fixed in an upright frame, which allows it to slide freely up and down, and on this frame are marked the figures which show exactly the strain in pounds on the cable. Thus when the strain is low the cable slackens, and the dynameter sinks low with it; when, on the contray, the strain is great, the cable is drawn "taut," and on it the dynameter rises to its full height. When it sinks too low, the cable is generally running away too fast, and the brakes have to be applied to check it: when, on the contrary, it rises rapidly, tension is dangerous, and the brakes have to be almost opened to relieve it. The simplicity of the arrangement for opening and shutting the brakes is the most beautiful of all. Opposite the dynameter is placed a tiller-wheel, and the man in charge of this never lets it go nor slackens his attention for an instant, but watches the rise and fall of the dynameter as a sailor at the wheel watches his compass. A single movement of this wheel to the right puts the brakes on, a turn to the left opens them. A good and experienced brakesman will generally contrive to avoid either extreme of a high or a low strain, though there are few duties connected with the laying of submarine cables which are more anxious and more responsible while they last than those connected with the management of the brakes.

### THE IMMERSION.

The machinery for paying-out is being put together at the Greenwich works. The process of immersion will take about a fortnight. The beginning of the shore end will be laid by a small vessel, which will meet the *Great Eastern* about twenty miles from the Irish coast. The cable will then be passed on board, connected with that in the great tanks, and the big ship will begin her voyage. To the uninitiated this process of cutting and joining the cable appears very mysterious, but the engineers, who are used to the work, face it without hesitation. The joints do not really endanger the insulation or the strength of the cable, as wherever they are made the external and conducting wires are spliced along a considerable length—sometimes not less than thirty yards—and the gutta percha carefully put on in separate layers, firmly pressed together by means of warm irons. The completeness of the joint is tested by laying it in an insulated metallic vessel containing water, and ascertaing by means of tests applied to this vessel, whether any elec-

tricity escapes from the joint as a current is passed along the cable.

In order to guard against any possible sources of accident, every preparation has been made in case of the worst, and, in the event of very bad weather, for cutting the cable adrift and buoying it. For this purpose a wire rope of great strength, and no less than five miles long, having a distiuctive mark at every one hundred fathoms, will be taken in the *Great Eastern.* This, of course, is carried in case of desperate eventualities arising, and in the earuest hope that not an inch of it will ever be required. If, unfortunately, its services should be wanted, the cable would be firmly made fast to its extremity and so many hundred fathoms of the wire rope according to the depth of water the cable was in measured out. To the other end of the rope an immense buoy would be attached, and the whole then cut adrift and left to itself till better weather. In the experimental cruises which were undertaken before the starting of the last Atlantic expedition, this attempt at buoying the cable was often tried in the deep water of the Bay of Biscay, but never with any great success, and in very deep water it would be a most forlorn hope iudced to try it at all.

THE MERCANTILE ADVANTAGES OF THE CABLE.

We have now to speak of the advantages which commerce will derive from the completion of the Atlantic telegraph. To say that it saves time and economises effort, is to present to the mind a generalization too broad for ready appreciation. But the benefits derivable from this great work are so innumerable, that a mere list of them would not only be difficult to make, but fatiguing to read.

In order, therefore, to get a tolerable idea of the value of the Atlantic cable, let us resort to an illustration. Fill a flat dish with water, and see saw it. Will the water always follow the inclination of the dish? Of course it will. But will the movements of the one always be identical in point of time with the movements of the other? No. If the dish is see-sawed quickly, the water may be seen running up one end of the dish while the other is tilted downwards. This phenomenon is caused by the momentum which the water had gained before the direction of the tilting was changed, and until that momentum was overcome by a new inclination of the dish, it continued to impel the water in a direction contrary to that which was exerted by the force of gravitation.

So, in commerce, the products of the world, which, if left free to move naturally, would be attracted towards the most profitable markets, are frequently impelled towards unprofitable ones, because the knowledge of which are the best ones becomes known in most cases only after the product has been already shipped to an unprofitable one.

All this waste of effort— all this source of mercantile loss and embarrassment ceases where the telegraph is established. Goods then go only where they are wanted, and always find a profitable market. *The markets of the world become equalized,* and equalization is economy and wealth to all mankind.

SOCIAL ADVANTAGES.

Finally, when the social advantages of the Atlantic telegraph are considered, it is seen to be a work not only of importance to the world's thrift, but to its morality and social advancement.

The universal postulate is belief; and mankind only war against one another from entertaining opposite beliefs. No agency has ever existed, nor ever will exist, so potent to dispel misunderstandings and to reconcile beliefs, as knowledge; and what is the telegraph but a means of transmitting knowledge? The Old World, by the Atlantic telegraph, will be drawn towards the New, and the New towards the Old. Our interests will become more identical, our beliefs more reconcilable; the artificial demarcatiou occasioned by our respective forms of governm nt will disappear, the people of Europe and American, instead of being called English, French, Germans, Spaniards, Prussians, Yankees, Mexicans, &c., will be called simply the people of Europe or America. Nationalities will gradually become less marked, the legislation of different countries will be more and more assimilated, races and creeds will melt into one another, civilization and enlightenment will penetrate the darkest corners of barbarism and error, and the earth will eventually become, what natural laws tend to make it when unobstructed by such impediments as ignorance and restraint, one vast land teeming with wealth and plenty, and peopled by a numberless community secure in the enjoyment of universal peace and happiness.—*Hunt's Merchants' Magazine.*

## THE RAILWAY OVER MOUNT CENIS.

Capt. H. W. Tyler, Royal Engineers, having been requested by the English Board of Trade to inspect and report upon the railway over Mount Cenis, has reported in full; and his report is published in the London *Engineer* of June 23. We shall briefly notice a few points in it.

There is no a break of 47.6 miles in the Mount Cenis Railway between France and Italy, over which passengers have to be carried by diligences—the time being 9 hours in summer, and 10½ in winter, on a good road 30 feet wide, with an average grade of 1 in 13. The traffic is impeded by snow and ice, which make it difficult to guide the vehicles when descending, and there is danger from avalanches.

Mr. Fell, an English engineer, has undertaken to avoid these dangers, and to shorten the time, by laying a railway with a middle rail gripped between two horizontal wheels, as was done in this country by Mr. Eschol Sellers. He is backed by men of means, Messrs. Brossy & Co., who are so confident that, although the tunnel will be finished in seven or eight years, and render their railway useless, they expect in that time to make a profit.

After an experiment in Derbyshire, it was determined to make a larger experiment on Mount Cenis, to satisfy the French and Italian governments, so as to secure the concession of the right to build the railway. The line is now constructed between Lanslebourg and the summit, commencing at 1,622 and terminating at 1,773 metres (5,815 feet) above the sea. It is 1½ miles long, with a mean grade of 1 in 14, and a maximum of 1 in 12; and passes round a corner joining two zigzags of ascent, on a curve of two chains radius; and except at this curve it is laid on the outside of the common road, leaving two-thirds of it clear for common road vehicles.

Less inconvenience than was expected has been found in working the locomotive so near the public road; and as the same horses are constantly employed on the line, it is expected that they will soon get accustomed to the engine, and all trouble will cease. During three months of working, no accident has occurred.

Two engines have been tried. No. 2 is made partly of steel, weighs 13 tuns empty, and 16.85 tuns loaded. The extra machinery for the horizontal wheels weighs 2.65 tuns. The boiler is 8′ 4½″ long, and 38″ diameter, and has 158 1½″ tubes, and 600 square feet of heating surface. Two cylinders, 15″ bore and 16″ stroke, work the four-coupled horizontal and the four-coupled vertical wheels, which are 27 inches in diameter. The wheel base of the vertical wheels is 6′ 10,″ and that of the horizontal wheels is 2′ 4″ The grip of the horizontal wheels can be regulated from the foot-plate. The vertical wheels are worked indirectly by piston rods from the front, and the horizontal wheels directly by piston-rods from the back of the cylinders. The engine drew 16 tuns. in three wagons, at the rate of 17¾ kilometres per hour, the pressure falling from 112 to 102½ lbs. in 1¼ miles; exerting 195 horse-power. The engine alone was run up a grade of 1 in 12½ by 40 lbs. pressure; and it was calculated that it could ascend the mountain with a gross load of 48 tuns at 8 miles per hour.

We think the middle rail may be dispensed with, and the horizontal wheels be made to grip one of the main rails. Mr. Brydges Adams proposes to V-groove both rails and wheels, like Robinson's frictional gearing, which will double the adhesion. Mr. Zerah Colburn proposes to run the drivers on stone tracks, which will give twice the adhesion of iron; he also proposes to put engines on all the vehicles, so that they will have sufficient adhesion on smooth rails; and this we think is the best proposal yet made by any railroad man; and is just what the common road locomotists proposed thirty years ago. We have ridden in a steam carriage over the worst hills on any high road in this region, without rails at all, and are of opinion that there is no more economical means to overcome gravitation than to do it in this simple way; and if any rail-*road* men, who are laying rails on common horse-roads, with steep hills, want to go faster than a horse-pace, we will refer them to parties that will build and guarantee engines of this kind that will work better than those complicated traction-rail engines.—*American Artisan.*

ST. LOUIS AND ST. PAUL RAILROAD.—Meetings are being held in all the counties along the route of the proposed Iowa Central Railroad to complete that important link in the direct communication between St. Louis and St. Paul, via Oskaloosa and Cedar Falls. The North Missouri Railroad has make provision to extend its track from Macon City (junction with the Hannibal and St. Joseph) to the State line, a distance of sixty miles, and the condition of the whole route may be shown by the following table of distances:

| | Miles. |
|---|---|
| From St. Louis to Iowa State line | 234 |
| From State line to Cedar Falls | 113 |
| From Cedar Falls to Minnesota State line | 96 |
| From Minnesota State line to St. Paul | 120 |
| Total number of miles | 589 |

ROAD ALREADY BUILT.

| | |
|---|---|
| From St. Louis to Macon City | 170 |
| From Cedar Falls to Waverly | 15 |
| From St Paul south | 70 |
| Total miles completed | 255 |
| Number of miles yet to build | 334 |

—The McGregor Western Railway earned in the month of June:

| | |
|---|---|
| Gross (on 40 miles) | $24,933 80 |
| Expenses of every kind, including interest on rolling stock | 14,234 61 |
| Net earnings | $10,699 19 |

Eleven miles more of road go into operation on the 1st of August prox.

## A RAILWAY TO THE BAY OF FUNDY.

We have before us a pamphlet containing a proposal to construct a railway from Whitehaven, which is the most eastern harbor of Nova Scotia, to the head of the Bay of Fundy, the object being to shorten the voyage across the Atlantic, and reduce as much as possible the time consumed in reaching Boston and New York after the vessels have once touched the coast. Whitehaven harbor was surveyed by the late Admiral Owen in 1846, who reported to the British government that it was "at the nearest available point of North America to Ireland," and that "its natural facilities greatly exceeded those of Halifax." Other engineers have corroborated the report of Admiral Owen, after having surveyed both routes to the head of the Bay of Fundy from Whitehaven and Halifax. By the route from Whitehaven, it is represented that the range of the Cobequid mountains can be avoided, while they have to be crossed by the Halifax and Eastern line. From Whitehaven to Galway—the two points between which it is proposed to establish a line of steamers—the distance is but little more than two thousand nautical miles, and it is declared that the passage can be made in a week, or one-third less than the present time; avoiding also the most difficult and dangerous points of Europe to the United States. The proposed railway would pass through rich gold mining and agricultural districts, and the coal fields of Picton, besides laying under tribute a region where building materials can be most readily and cheaply obtained. A charter has atteady been granted by the Nova Scotia legislature to run a branch line from Whitehaven in the main Trunk line from Halifax on its way to the head of the Bay of Fundy; and it is proposed now to organize a company of the capitalists of Boston, New York and Philadelphia, as of Great Britain and Ireland, to take up the work and push it to completion. In which case, a continuous and unbroken railway communication will be had through Nova Scotia, New Brunswick and the United States, Canada included. *Boston Post.*

## SAVINGS BANKS OF NEW YORK.

The total deposits in twenty-three institutions in this city on 1st January last were $72,928,796; in eight similar institutions of Brooklyn, $13,266,576; and in forty-two located in the interior cities and towns, $25,598,053: making altogether, in the State of New York, an aggregate of $111,793,425.

Estimating the population of the State at this time to be about 4,000,000, this will show an average deposit of $28 to each inhabitant; and the number of depositors being 456,721, it follows that there is one savings bank depositor to about every nine inhabitants, and that the average amount of savings to each depositor in January last was a fraction over $244.

In the cities of New York and Brooklyn it appears that the combined savings are $86,195,372, and the depositors 353,430 in number, an average of about $244 to each, which is the same average for the whole State. For these cities the average is about $100 per capita of the population; for the remainder of the State it is about $10 per capita.

In Vermont the average savings deposits to each depositor are $313, while the average per head of the whole population is only $11 21, the number of depositors being 11,284, out of 315,098 persons.

The relative population in 1860, states the *Bankers' Magazine*, and of savings deposits, and number of depositors, in each of the New England States, in 1864, were as follows:

| STATES. | POPULATION, 1860. | SAV. DEPOSITS, 1864. | AV PER HEAD. |
|---|---|---|---|
| Massachusetts | 1,231,066 | $62,557,604 | $50 80 |
| Maine | 628,279 | 3,672,975 | 5 87 |
| Connecticut | 460,000 | 29,142,288 | 63 35 |
| New Hampshire | 326,147 | 7,661,738 | 23 50 |
| Vermont | 315 098 | 3,523,238 | 11 21 |
| Rhode Island | 174,620 | 12,815,098 | 73 65 |
| Totals | 3,135,210 | $119,281,141 | $38 08 |
| New York | 3,880,735 | $111,793,425 | $28 81 |

Rhode Island shows an average of $314 to each savings depositor, and $73 65 average per head of the whole population of the State

Connecticut stands next in the average for each depositor, being $239, and the depositors 121,682 in number, or more than one-fourth the whole population of 460,000—the aggregate deposits in the whole State being $29,142,288, equal to $63 35 per head of the whole population.

Massachusetts, with a population of 1,231,066 in 1860, had last year 291,616 savings depositors, or nearly 24 per cent. of the whole. The aggregate sum to the credit of these depositors was $62.557,604, or an average of $214 to each, and equivalent to $50 80 per head of the whole population.

Maine had last year savings deposits to the extent of $3,672,975, and depositors 18,506, being $198 to each, on an average.

While in Connecticut more than one-fourth of the whole population are depositors in savings banks, in Maine they form less than three per cent. of the whole, with an average of $5 87 per head, the lowest of all New England. In New Hampshire, with a population of only 336,147, the savings deposits are $7,661,738, or double those of Maine. The average in New Hampshire is $177, and the number of depositors 43,175.—*Stockholder.*

## RAILROADS IN MICHIGAN.

The officers of the Grand River Valley Railroad have advertised to let contracts for grading, etc., 51 miles, or more than half of their road. Monthly assessments upon the capital stock have been ordered, and the company have opened an office in Jackson.

The company who have purchased the property, franchises and stock of the Port Huron and Owasso Company, call themselves the Port Huron and Lake Michigan Railroad Company. The managers of this corporation are magnificently sanguine. They propose to build a link in an independent line of railroad, of uniform gauge, between Chicago and New York, Boston. Portland, Quebec, and ultimately Halifax. It is claimed that 30 miles of the road, to the west line of St. Clair county, can be completed at any time within sixty days from the time work is begun on the road. The subscriptions in Lapeer county, it is said, will exceed $150,000, and that this sum, with the St. Clair county subscriptions, will construct over 12 miles of the road. It is stated that 30 miles of the road are already graded, and the right of way secured for two-thirds the length of the road, and that its franchises and property are worth to-day over $500,000, with stock subscriptions and other valued aid to nearly half a million more. This road also expects to secure the Congressional land grant of 40,000 acres of land. The directors say they have had propositions both from Lapeer and Flint, to run the road from these points to Lansing, but that they intend to select the most direct route to Chicago! It will be seen that our enterprising friends in Port Huron look for nothing less than another Grand Trunk line across Michigan, leaving Detroit at one side. Lapeer county seems to be wide awake upon the subject, and a number of her towns have voted liberal aid.—*Detroit Advertiser.*

## ST. ANTHONY—MINNEAPOLIS.

The *St Paul Press* of the 12th inst. devotes its entire first page to a description of Minneapolis and St. Anthony—their natural scenery, their business, &c. It is space well occupied, for no towns in the North-west are more worthy of description. They are situated nine miles above St. Paul. Minneapolis is on the west and St Anthony on the east side of the Mississippi. The former is the more picturesquely situated, and is more a place of residence than the latter.

St Anthony Falls is one of the best water powers in the world. The "St. Anthony Water Power Company" was first organized in 1855, composed principally of eastern capitalists. The "Minneapolis Mill Company" was organized in 1856, and is composed of "heavy" men of the North-west. The dam and canal were built in 1857–8.

The principal mills are for sawing lumber. Of these there are six on the Minneapolis side, having 9 gangs of 22 saws each; 6 double circular saws; 6 shingle machines, and 6 lath machines. The total cost of these mills was $140,000. They employ 300 men and can saw 430,000 feet per 24 hours. There are three mills on the St. Anthony side, capable of sawing 200,000 feet per day.

Though compelled to commence late this season, the Minneapolis mills have sawed twelve million feet, and the St. Anthony mills six. It is estimated that on the Minneapolis side thirty-eight millions and on the St. Anthony side, nineteen millions more will be sawed before the close of the season. This will make the entire product of this season, seventy-five million feet! If logs could have been obtained at an earlier period, this amount would have been increased to eighty-five million feet.

The most of this vast amount of lumber finds a market at the river towns along the banks of the Mississippi below St. Paul. Some of it reaches Memphis. The prices of lumber are still high and are likely to continue so for some time. The amount of capital invested in this trade is fully one million and fifty thousand dollars.

The flouring mills turn out little short of one thousand barrels per day. There is about a hundred and fifty thousand dollars invested in this branch of business. The principal shipments of flour are to St. Louis, Chicago, and Boston.

Besides the lumber and flour trade, there is quite a business done in the manufacturing of wooden ware, woolen cloths, paper, sashes, doors, &c. The total capital invested at this point in manufacturing interest is $1,435,000. The daily products are: lumber, 400,000 feet; flour, 400 barrels; pails and tubs, 800; woolen cloth, 700 yards; paper, 3,000 lbs.

When we consider how recently this region has become the theatre of business, these figures are astonishing. But this is only the beginning. This grand natural water power is to be developed vastly beyond the most sanguine expectations of old settlers of that region.

Our citizens who wish to indulge in a pleasant trip during the summer months. will find a visit to St. Paul, St. Anthony, Minneapolis, Fort Snelling and Minneaha, a most delightful arrangement.

## MONETARY AND COMMERCIAL.

There never was a time in which there was less to be said, either new or interesting, on money affairs. At the same time there is abundance of speculation as to what will happen. In regard to the price and demand for money, here or elsewhere, the summary of the whole matter would be, that everything moves very evenly on without any great change from week to week.

The demand for loans is moderate, and readily met at from 8 to 10 per cent. Gold, which has been up to 145, was, on Monday, down to 141¾. The bankers in Cincinnati seem to have thought it would rise, but we see no reason for that opinion. The supplies of gold are ample, and the demand not very great. The Cincinnati *Gazette* says:

The public were never more puzz'ed about gold than they are now, and the feeling is so uncertain and so sensitive that there is not much disposition to venture on either side. It is known that the Treasury Department, in order to keep down the stock of gold on hand, and to provide for the payment of the August coupons on the 7 30 loan, has for some days been selling the customs receipts averaging $300,000 per day, but this has not affected the price materially. This would seem to indicate a strong undercurrent, and a more solid basis than Bull operators would be able, by transactions, real or fictitious, to construct. The surface indications, for some time, have favored lower prices. A panic has even been predicted. The movements in favor of this were favorable. There has been no demand for export, owing to the large shipment of bonds, nor is there likely to be for some time, a resumption of specie shipments."

Breadstuffs in England are rather rising and the weather not good. Should the British crops be injured, we shall export all we have to spare. But of wheat, how much shall we have to spare? We see no reason to change our opinion that the wheat crop will he short and the supplies in the country not very large.

The New York *Times* says:

The mail steamer of yesterday from California brought the following statement of the regular shipments of gold and silver from San Francisco for the first six months of the present calendar year:

| | 1862. | 1863. | 1864. | 1865. |
|---|---|---|---|---|
| New York | $11.29 ,851 | $6,050,976 | $5,607,940 | $6,996,794,61 |
| England.. | 4,216,841 | 15,008,427 | 19.835,269 | 9,769,532.00 |
| China.... | 1,007,272 | 1,603,059 | 2,910,783 | 378,926.00 |
| Panama... | 232,007 | 365 036 | 186,265 | 235,900.00 |
| Other p's. | 85,645 | 190 083 | 452,514 | 267,360.17 |
| Total.. | $16,832,616 | $22,757,581 | $28,993,711 | $21,050,613.23 |

The amount to New York is exclusive of about two millions, transferred by steamer from the San Francisco to the New York Sub-Treasury Office for Government account

The San Francisco *Bulletin*, reviewing the past six months of gold and silver mining, says:

"Our regular semi-annual treasure statement shows that the receipts of treasure at this port from different sources during the last six months have been $29,225,007, of which amount California and Nevada contributed $25,671,792. The product of gold and silver mines on this coast for the first six months of last year was estimated at $28,000,000; so we have here an increase of $4,225,007, while the increase this year over the same period in 1863 is $3,581,989. The receipts by private hands from the interior, sometimes estimated at fifteen to twenty per cent. additional to those manifested, and are not included in the total given above. If we add to the amount returned for 1865 the usual estimate for receipts by private hands, and include amount of ores sent elsewhere for reduction, we shall find the total product of the precious metals on this coast, for the past six months, so far as it passed through San Francisco, to be not less than $30,000,000."

The daily papers give us an unusual number of financial crimes; some of them of great magnitude. A teller of the Phoenix Bank (New York) has been detected in a defalcation amounting to $300,000. The cause is the old story: fast women, dissipation and delusion. A gold operator has absconded with $250,000 in gold, which he had drawn on false checks. Very probably we shall hear before ong of many more similar disasters.

---

ILLINOIS CENTRAL RAILROAD.—This Road pays more revenue to the General Government than any road or corporation in the United States. It is the longest road in the world, and its principal depot is the largest and most imposing in this or any other country. Its officers in this city, and along the entire line, are accommodating and competent gentlemen, and the conveniences afforded passengers on the I. C. R. R. Co., are unsurpassed by any upon which we ever rode. It runs through the entire length of the State, commencing at Dunleith and ending at Cairo, with a branch diverging from its trunk at Centralia and running through to Chicago, making a grand total of 708 miles.

The company has just completed a round house at Cairo. It is a large stone structure capable of holding twelve locomotives.


Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M. |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10: 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt.

BENJ. H. LATROBE AND C. H. LATROBE,

CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also, the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY TO EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:00 A. M. | 10:40 P. M. |
| HAMILTON..... | 9:57 " | 11:43 " |
| DAYTON..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 10:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M. |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE TO THE OIL REGIONS OF PENNSYLVANIA.

Passengers to the Eastern Cities will find the

Atlantic & Great Western R'y

A most Dseirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for all Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No. 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Sup't.
J. P. SARVER, CHAS. COOK, } Passenger Agents.

# COUPON AND LOCAL TICKETS!

## CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

**CONSECUTIVELY NUMBERED**

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

***Ticket Agents and other Railroad Men are invited to call and see our work.***

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD.


## GOVERNMENT TRANSPORTATION.

GENERAL ORDERS No. 17.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., March 16, 1865.

1st. For the purpose of producing uniformity in the Transportation service and guarding against abuses, blank books of Transportation Orders will hereafter be issued from this office to the Chief Quartermaster of each Department, to be by him immediately furnished to each officer under his order entitled to issue the same; after the receip of which no other form will be used, unless in emergencies when the prescribed blank form cannot be had, and then the reason for not using it must be stated in the order.

These blank orders will be numbered and registered in this office in such manner that there will never be two orders of the same number in circulation; they will be charged to the Chief Quartermaster to whom sent, who will in like manner charge and hold responsible his subordinate officers.

On exchange of posts, or on transfer to another officer, like receipts must be taken and forwarded to the Chief Quartermaster of each Department.

2d. Within five days after the end of each month, a concise report will be made to the Department Quartermaster of the number of orders issued, the number cancelled by error (which must accompany the report), and the number remaining on hand, with a statement of the amount of transportation furnished in the month; which report in a condensed form (accompanied by the orders so cancelled) will be by him immediately transmitted to the Quartermaster General, under covelope, endorsed on margin "Rail and River Transportation."

3d. The marginal register should contain the substance of the order issued, and will be preserved by the officer issuing for his own protection, or return to the Department Quartermaster or this office, as may be hereafter required.

*Care should be taken at all times to keep on hand a sufficient supply of these blank orders*, which can be obtained upon application to the proper Senior or Department Quartermaster.

4th. Unless in extraordinary circumstances, all rail and river transportation, passenger and freight, at any post, will hereafter be under the control and management of a single officer, on whom requisitions will be made by other officers requiring transportation.

5th. When more than five persons, in one party, are to be transported over one road, or a continuous line of roads, separate orders for transportation must be issued for each road to be passed over These orders should be received on the train instead of tickets, and are to be receipted by the party named in the order, and given up on the cars—the officers, or persons in charge, filling the receipt with the number actually carried. Five persons, or a less number, may be carried over a continuous line of roads upon a single order for transportation, and this order may be exchanged at the starting-point for tickets over the entire route.

6th. Settlement should not be made nor vouchers given to railroads on orders for passenger transportation properly belonging to other roads, but the *passenger* accounts for each road should be made up separately in the name of the roads to which they belong.

7th. Appletons' Railway Guide for January, 1865, will be used as a standard for indicating routes and fixing distances, unless the actual distance is proved to be less, in which case settlement will be made on the basis of actual distance. Where this Guide cannot be more readily procured it can be furnished from this office.

8th. When a number of troops are to be transported from any point to any other point, on the same day or train, it should be done in squads as far as practicable. A single transportation order, or set of orders, should be given to the ranking officer, or most responsible person of the several detachments.

9th. Blank books of Free Transportation Orders will also be furnished, to be used on boats belonging to, or in the service of, the Quartermaster's Department, or on railroads operated by the Government. The free passes in these books will be given to persons entitled to receive Government transportation, and should not be issued without designating on the order the boat or road on or over which the person is to be transported. The marginal registers in these books will also be preserved for return to the Department Quartermaster, or to this office, as may from time to time be required.

Should the route to be traveled be in part over roads or on those owned by private parties or companies, care should be taken that Free and Pay Orders are given as the case may require, or such requisitions furnished as will enable the party entitled to transportation to procure it at points where pay transportation commences.

10th. To warrant the granting of transportation, except in cases specified by Regulations or General Orders, published for general information, the person demanding the same should show a requisition or order from competent authority requiring the movement by public conveyance the performance of public duty.

The original requisition, when not necessarily required by the officer presenting it should be retained by the officer furnishing the transportation; in other cases, a certified copy or necessary extract from the order should be furnished to, and preserved by the officer granting transportation as his proper authority therefor, and a certified copy of the same must be endorsed on the back of the order.

11th. When the cost of transportation is to be reimbursed to the Government, as in the case of sick and furloughed soldiers, the required certificate should not only be made upon the furlough or order, but the transportation order should also be endorsed on the back substantially as follow: "The within transportation, furnished under General Order ——, and the proper officers duly notified. ——— ———
A. Q. M."

12th. When transportation is granted to persons not in the military service, full explanations therefor should be given

13th. Orders for transportation should give the name of the party to be transported, or if there are several, then of the officer or person in charge, and state the number of men to be transported.

Orders for "one man," "ten men," and the like, without designating any name, are improper

14th. The receipts for transportation should he filled up in ink by the officer or person named in the order before signing, and if he cannot write his name, there should be a witness to his mark.

Names and places should be written distinctly in full, and not abbreviated.

15th. Duplicates of orders for passenger transportation should not be issued.

16th. When a requisition calls for transportation to any given point and return, the order should be issued to the place of destination, and the return transportation should be obtained at that point, provided it can there be procured.

17th. Upon the form of order now issued should be presented all the facts necessary to enable an auditing officer to decide as to the regularity or propriety of the order, so that it may be paid by any authorized disbursing officer.

18th. Erasures, interlineations, or alterations, if made against the interest of the Government, should be explained on the order by the issuing or other competent officer; otherwise, the transportation should only be settled for in accordance with the order before change or modification.

19th. Transportation by water being generally the cheapest should be selected when consistent with the interests of the service All transportation should be furnished by the shortest practicable route, unless a different route is indicated in the order which directs the movement. Where there are two or more competing routes without material difference in distance or time, the business should be divided in equitable proportion between them, the distance for which compensation is made being estimated by the shortest practicable route.

20th, In no case is subsistence furnished by the Quartermaster's Department.

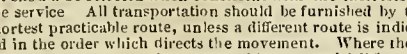
21st. The good of the service requiring that railroads should obey the requisitions of officers properly authorized to demand transportation, in case compensation is made by the Government for illegal or unauthorized transportation so required, the officer making the requisition or issuing the order will be charged therewith, or if not paid by the Government, the railroad will be entitled to recourse upon such officer.

By order of the Quartermaster-General.

LEWIS B. PARSONS.

*Colonel, and Chief of Rail and River Transportation.*


## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch

For Rates, Bill of Lading, or any information desired shippers will please apply to

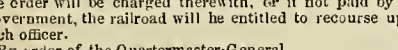
H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent.
my11 Pittsburg. Pa.

## Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:30 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO


## *STEAMSHIP COMPANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | |
|---|---|
| WASHINGTON..... | 3,204 tuns, 900 horse-power. |
| LAFAYETTE..... | 3,204 tuns, 900 horse-power. |
| EUROPE..... | 3,254 tuns, 950 horse power. |
| FRANCE..... | (afloat), 900 horse power. |
| NAPOLEON III..... | (afloat), 11,00 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its equivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building)..... | 3,412..... | ——— |
| ENGLAND (now building)..... | 3,430..... | ——— |
| SCOTLAND (now building) | 3,430..... | ——— |
| ERIN..... | 3,310..... | Grace. |
| HELVETIA..... | 3,315..... | Prowse. |
| PENNSYLVANIA..... | 2,872..... | Grogan. |
| VIRGINIA..... | 2,872..... | Lewis. |
| LOUISIANA..... | 2,166..... | Axplett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to
WILLIAMS & GUION, No. 71 Wall street.

For steerage passage apply to
640* WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN..... | $90 00 | STEERAGE..... | $30 00 |
| First Cabin to London.. | 95 00 | Steerage to London. | 34 00 |
| First Cabin to Paris.... | 105 00 | Steerage to Paris ... | 40 00 |
| First Cabin to Hamburg | 100 00 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE, The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR..... 2,595 60-95 tuns.
WISLIAM R. BELL..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge.

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
640* JAMES A. RAYNOR, No. 10 Barclay street.

## CENTRAL RAILROAD
—OF—
## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,
Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

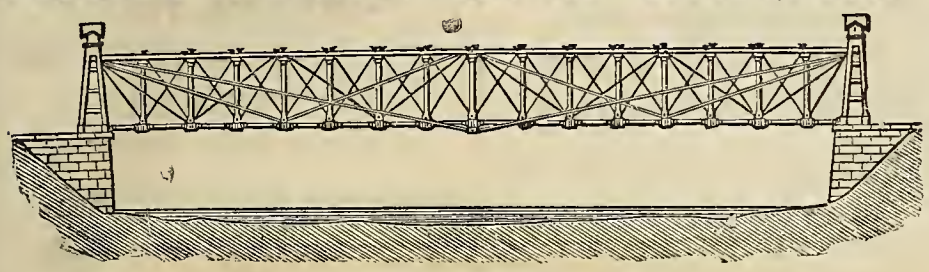
JAMES H. HOYT, Superintendent.

## NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m., and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '53. 1y. Letter Box, 1392. C. J. SCHULTZ, Pittsburgh, Pa.

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets, Sash Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27.1y

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or not the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines. 419 y 1

## KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA.

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

## FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

## BUSH & LOBDELL,

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS

Either Single or Double Plate,

With or Without Axles.

WHEELS FITTED

To Hammered or Rolled Axles,

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

MACHINE SHOP

SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION

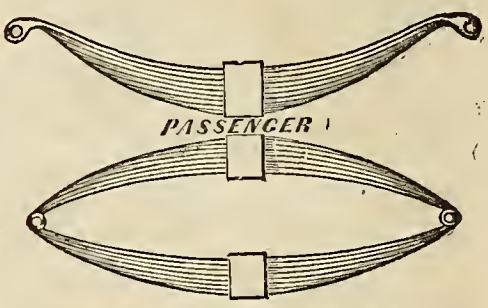
47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

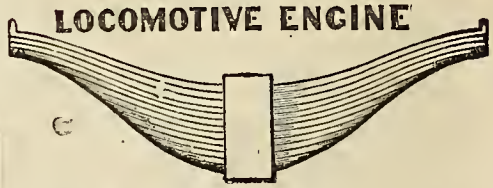
RAILWAY SPRINGS.

FREIGHT






LOCOMOTIVE ENGINE



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

ELLIPTIC AND SEMI-ELLIPTIC

SPRINGS,

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

PHILP S JUSTICE,

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Stee Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

No. 47 West Front St., CINCINNATI

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

## W. M. F. HEWSON,

STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commisson only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by w running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, witb painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHING-TON CITY.

W. P. SMITH. *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't. Bellaire, O.*
L M COLE. *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M. |

☞Sle ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M. leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Bur net House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Ibuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St, Louis and Cairo | | |
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Lonis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent.

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENOER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago n advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, C ncinnati Agent.

## MOSELEY'S

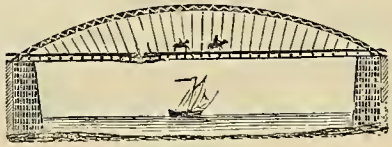
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2. MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

**WILMINGTON DELAWARE.**

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9.

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facili es for forwarding the r work to any part of the country, w thout delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅛ inch to 8 inches inside diameter, with screw and socket conneo tions, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especial for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., a. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!!



## FOUR PASSENGER TRAINS DAILY

RAINS LEAVE PHILADELPHIA for the SOUTH DAILY'

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.44 P. M (Express

On Sundays, 10.24 P. M.

☞Through connectiona made for all points East a Wes

WM. BARNS SUPT

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, - - } Editors

CINCINNATI:
THURSDAY, AUGUST 24, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| Morrow Accommodation | 5:20 P M. | 7:45 A. M. |
| *Atlantic & Great Western—* | | |
| Morning Express | 9:40 A. M. | 7:30 A. M. |
| Night Express | 10:50 P. M. | 6:30 P. M |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Toledo, Detroit and Huntsville | 5:00 P. M. | 12:50 P. M |
| Richmond and Chicago | 6:00 P. M. | 12:25 A. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | | 7:55 A. M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M. |
| Indianapolis & Cambridge City | 6:00 A. M. | 10:05 P. M. |
| " " " | 4:00 P. M. | 12:25 P. M. |
| Eastern Night Express | 10:50 P. M. | 7:50 A. M |
| Mail and Express | 9:40 A. M. | 6:30 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Springfield and St. Joe Express | 1:00 P M. | 5:07 P. M. |
| St. Louis and Chicago Express | 10:00 P M. | 5:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 5:15 P. M. | 8:20 A. M. |
| Harrison Accommodation | 9:30 A. M. | 8:40 P. M. |
| Chicago and St. Louis Express | 7:15 A. M. | 9:00 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 6:00 A. M. | 10:00 P M. |
| Connersville, Cambridge City & Indianapolis Express | 4:00 P. M. | 12:25 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 7:45 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:12 P. M. |
| Evening Express | 2:35 P. M. | 6:00 A. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton. Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi. and Indianapoli & Cincinnati Roads, are run by Vincennes me which is 12 inutes slower than Cincinnati time.

## THE GREAT TRUNK LINES OF R. R.

THEIR CONNECTIONS WITH THE VALLEY OF THE OHIO.

There are four great lines of Trunk Railroad connecting the Atlantic States with the Western Mississippi States; all of which make their connections through the State of Ohio; and there can be no other such lines, for obvious geographical reasons. South of the Ohio River the whole country is so intersected with mountains that no such lines can be made, except that through the South West Valley of Virginia, and there make only a Southern route. It makes no direct connection with the Valley of the Ohio, and none with the North Western States. On the other hand, no other then these four can be made from the East, except as modifications of these. For the Baltimore & Ohio R. R. takes the Valley of the Potomac. The Pennsylvania Central takes the Vallies of the Susquehanna and Juniata. The Erie takes the mountains by the Vallies of the Delaware and Susquehanna, and the New York Central goes round, by ascending the Hudson, and passing on the Lake Shore. But when these roads reach Ohio, whose general surface from the slopes of the mountains is that of an undulating plain, they can take several routes, and hence to reach Cincinnati in the Valley of the Ohio, and Chicago in the North West, there commences a new competition. This has resulted finally in compelling each Great Trunk line to secure an independent route to the great Western centres. The last one, that noticed in the Record last week, in reference to the Central, has been made, and we have now these Great Trunks stretching out their arms clear to the Mississippi.

One of the immediate causes of these arrangements has been the completion of the Atlantic & Great Western, which by going on an inner line from the New York Central, and by making with the Erie or the East, and to Ohio & Mississippi in the West, a continuous line from New York to St. Louis (1200 miles) on one broad gauge, at once shewed to all intelligent minds a competing route of such advantages, that it must necessarily direct business from other channels, unless it could be met by the other trunk line with similar connections. For several year this attempt to secure independent lines to the West, till now it becomes a necessity, for the reason we have given, and for another which strikes railroad men with great fear. During the four years of the war it would do very well to look only to Chicago or St. Louis connections, but when peace comes and renews the trade of Cincinnati with the South West, the whole case assume a new aspect. A large amount of business is about to come in the direction of Cincinnati and Louisville, which will not go to Chicago at all, and but partially to St. Louis. Add to this the whole product and trade of the Ohio Valley is about to be greatly enlarged, and whichever of the Great Trunk lines has the best connection with Cincinnati, and the most competing power, will succeed but in showing the profits of the enlarged trade in the Ohio Valley. Should, as we said, this strife for Western connections, which become active as the success of the Great Western become assured, has been greatly increased on the return of peace. The matter of connections on the Ohio Valley, as we understand them, stand now as follows:

1. The first in order and the first in its beginning is the Baltimore & Ohio road. This road has two outlets to the Ohio river, one by Wheeling, and one by Parkersburg. The former connects with the Ohio Central, and this again with the Little Miami at Columbus, and the Cincinnati & Zanesville at Zanesville; but the latter road joins the Little Miami at Morrow; and hence the Baltimore connection by this route is really with the Little Miami. But the Parkersburg route is much the shortest, and as to Cincinnati, is the natural connection. This connection is made by the Marietta road. By means of a good bridge over the Ohio at Parkersburg, this road becomes the shortest and most direct line from Baltimore to Cincinnati. But, in the way of absolute success on this route there were three obstacles, each of which was a very decided difficulty. First, the want of the bridge, next the want of the tunnels near Marietta, for want of which the hills there could not be cheefly traversed, and went on an independent entrance into Cincinnati, for, until the present time, the Marietta road has been compelled to use the Little Miami from Loveland to Cincinnati—23 miles. But, all these obstacle are fast giving way. The bridge over the Ohio is begun; the tunnels are nearly completed; and an independent route from Loveland into Cincinnati is also nearly complete. In another year the whole line from Baltimore into Cincinnati will in all probability be entirely finished, making the shortest line from tidewater to the Central West. When we reflect that the Baltimore road has been half the time in the hands of the rebels, and that the whole trade of the South West were cut off by the war, we can not help seeing that the restoration of these, and the completion of a solid, direct and short line into Cincinnati, will be attended by a magnitude of business and prosperity equal to that of any line in the United States.

2. Next in order is the Pennsylvania railroad. We have remarked in a former article that this is not only an admirable road but that its receipt amounting to *thirteen million per annum*, is second to only two or three roads in the world. The Pennsylvania road early made its connections with Chicago by means of the Ohio & Pennsylvania, now called the Pittsburg, Fort Wayne & Chicago road. But it has never had direct connection with

Cincinnati. To obviate this the Pennsylvania road has always aimed at getting a route through Steubenville, where the Steubenville road and the Little Miami would make a very direct route. For a long time this was resisted by the Legislature of Virginia, the road leading across what is called the "Panhandle." This difficulty was at length overcome, and in the war time Congress granted the power to make the bridge over the Ohio river, as it had similar grants for bridges at Wheeling, Packersburg, Cincinnati and Louisville. The "Panhandle" road is, we believe, nearly completed, and the bridge is finished The Steubenville road now makes its connections with Cincinnati by the Little Miami, and we understand the future line, that is the Trunk line of the Pennsylvania road to the Ohio Valley is to be made up of the Pennsylvania, Panhandle, Steubensville, and Little Miami roads, making, like the Baltimore & Marietta, a continuous direct line from tidewater at Philadelphia to the Central Ohio at Cincinnati. This will be a very direct line, and taking Philadelphia as the starting poin, will offer equal competition with the Baltimore route. The management of the Pennsylvania and of the Little Miami roads is admirable, and in that report can not be excelled.

3. We come now to what we have recently described at length, the broad gauge route from New York to St. Louis—1200 miles. Whether the broad gauge is of any advantage, we don't know; but having such an immense line, from New York city through the oil regions, the richest parts of Ohio, and on an interior line, is an immense advantage. This route is now on the full tide of success; and we come

4th To the New York Central. This road has no direct connection with Cincinnati; but practically made one which did very well till the other trunk lines began to interfere with it. First we have the Erie (the immediate competitor with the Central) uniting with the Great Western, and thus making a route which any one who looks on the map can see almost effectually cuts off the New York Central from the Ohio, because it ranks Cincinnati on an entirely interior line, continuous and shorter. The rail connection of the New York Central was with the Cleveland and Columbus and Little Miami; but here we see that the union of interests, between the Little Miami and Pennsylvania, makes the New York Central a merely secondry consideration. It had become high time for the Central to make a route of its own, if that was profitable. The result is what we announced last week, the junction of a new route by the Central, via the Lake Shore to Sandusky, the Sandusky and Dayton, and the Dayton Short Line. That this is a wise movement, we have no douht at all. It is the only one by which the Central can have an independent line to Cincinnati. There is little difference between length of this route and that by Columbus, and it is a better route now than either of the lines of which we have spoken. A very short time now will see the completion of all the several lines of which we have spoken; and then will commence the great and real competition between the trunk lines.

## GREAT WESTERN R. R., CANADA.

This railway is one of the great and deservedly popular thoroughfares, leading directly from the West to the East. The Eastern terminus being at Suspension Bridge and Niagara Falls, of course thousands travel over this road to see these wonders of nature and art. Everything is done by the managers of this railway to conduce to the comfort and pleasure of the traveling public. We recently had occasion to pass over a portion of this road, and of course found it in a most excellent condition—the cars neat, spacious and comfortable; the conductors gentlemanly and obliging; and the track remarkably smooth; trains on time, close connections made with other roads, and everything running like "clock-work." The "Great Western" connects with the "Michigan Central" and "New York Central" railways. We heartily commend this route to the traveling public.

During the war which has so happily closed, the Great Western Railway in connection with the Michigan Central, has responded nobly to the calls of the Sanitary Commission and other kindred organizations, for free transportation for soldiers who have been sick and wounded and penniless, great numbers of whom have been sent over those roads. The fact that there is but one change of cars to be made on these roads from Chicago to Suspension Bridge—that the carriages by night and day are luxurious, and the road always smooth—has led to more frequent calls on these roads for invalid soldiers than on any other East. In no instance, where worthy cases have been presented, have these roads refused to grant the patriotic charity asked of them. This should not be forgotten now.

A. Wallingford, Esq., of this city, is the gentlemanly agent of this road. He manages his part with great ability and skill; and there is no more popular railroad man in the West. Through his efficient administration this road has become a great favorite with Western people.—*New Covenant.*

CAIRO AND ST. LOUIS R. R.—This road fully organized last week, Wednesday, at a Directors' meeting held at Cairo, when S. S. Taylor was elected President, and D. T. Linegar Secretary, *pro tem.* Louis Jorgensen was elected to serve as Secretary of the Boad until the next election of directors.

Hon. Sharon Tyndale was appointed Engineer, and directed to have to routes surveyed from Cairo to St. Louis, and authorized to employ a commissioner to secure the right of way and secure subscriptions to the stock of the company.

A committee was appointed to procure, by subscription, the necessary funds to defray the expenses of the preliminary surveys, which expenses it was estimated would amount to $3,000. Of this amount $1,100 was secured on the spot.

From estimates submitted to the Directors it was concluded that the cost of grading and superstructure of the entire road from Cairo to East St. Louis would not exceed $2,000,000.—*R. R. Gazette.*

## STATISTICS OF TOBACCO.

We have in the "Agricultural Statistics" of the Census Tables, the following results of the culture of tobacco in the United States. The whole amount grown is 434,209,461 pounds—equal to 434,000 hogsheads.

The following table shows the quantity of tobacco grown in the New England States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| Connecticut | 6,000,133 | 4,267,624 |
| Maine | 1,583 | ..... |
| Massachusetts | 3,233,198 | 138,246 |
| New Hampshire | 18,581 | 50 |
| Rhode Island | 705 | ..... |
| Vermont | 12,245 | ..... |
| Total | 9,266,445 | 1,405,920 |

In 1850 the amount of tobacco raised in the New England States was less than one and a half million pounds, while in 1860 it was over nine and a quarter million pounds—an increase of over 500 per cent.

Of the nine and a quarter million pounds raised in the New England States, Connecticut produced six million, and Massachusetts over three and one-fifth million.

The following table shows the amount of tobacco grown in the middle States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| New York | 5,764,582 | 83,189 |
| New Jersey | 149,485 | 310 |
| Pennsylvania | 3,181,586 | 912,651 |
| Maryland | 38,410,965 | 21,407,497 |
| Delaware | 9,699 | ..... |
| District of Columbia | 15,200 | 7,800 |
| Total | 46,531,517 | 22,411,44 |

Maryland produced nearly twenty-one and a half million pounds of tobacco in 1850, while all the other middle States produced only about one million pounds. In 1860 this State produced thirty-eight and a half million pounds, while the other middle States produced over nine million. New York and Pennsylvania show a remarkable increase in the tobacco crop. New York has increased from 83,189 pounds in 1850, to over five and three-fourth million pounds in 1860. The increase in Pennsylvania is by no means so great, but is nevertheless quite striking.

The following table shows the amount of tobacco raised in the southern States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| Alabama | 232,913 | 164,990 |
| Arkansas | 989,980 | 218,936 |
| Florida | 828,815 | 998,614 |
| Georgia | 919,318 | 423,924 |
| Mississippi | 159,141 | 49,960 |
| North Carolina | 32,853,250 | 11,984,786 |
| South Carolina | 104,112 | 74,285 |
| Louisiana | 39,940 | 26,878 |
| Tennessee | 43,448,097 | 20,148,932 |
| Texas | 97,914 | 66,897 |
| Virginia | 123,968,312 | 56,803,227 |
| Total | 203,642,093 | 90,961,429 |

Virginia, Tennessee, and North Carolina are the three principal tobacco-growing States

in the south. These three States produce two hundred million pounds of the two hundred and three and a half million pounds raised in the southern States.

The following table shows the amount of tobacco raised in the western States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| Illinois | 6,885,262 | 841,394 |
| Indiana | 7,993,378 | 1,044,620 |
| Iowa | 313,168 | 6,041 |
| Kansas | 20,359 | ..... |
| Kentucky | 108,126,840 | 55,401,196 |
| Michigan | 121,099 | 1,245 |
| Missouri | 25,086,196 | 17,113,784 |
| Ohio | 25,092,581 | 10,454,449 |
| Wisconsin | 87,340 | 1,268 |
| Minnesota | 38,938 | ..... |
| Nebraska | 3,636 | ..... |
| Total | 173,758,787 | 84,963,997 |

Next to Kentucky, Ohio and Missouri are the greatest tobacco growing States in the west. The crop has also increased largely in these States since 1850. Indiana and Illinois come next, the former producing nearly seven million pounds.

The following table shows the amount of tobacco grown in the Pacific States in 1860 as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| California | 3,150 | 1,000 |
| Oregon | 405 | 325 |
| New Mexico | 7,044 | 8,467 |
| Utah | ..... | 70 |
| Washington | 10 | ..... |
| Total | 10,609 | 9,862 |

But little tobacco is raised on the Pacific coast, and it has increased a mere trifle since 1850. In fact, in New Mexico there is an actual decrease, which is true of no other State except Florida.

The returns show that tobacco is raised in every State, and in all the Territories except Dakota.

In 1850 the amount of tobacco raised in all of the States and Territories was eight pounds to each inhabitant, and in 1860 about fourteen pounds. The unsettled condition of Kentucky since the commencement of the war, with the loss of almost the entire crop in Virginia, have caused a great diminution in the supply of tobacco, and prices have advanced very rapidly. This has stimulated the cultivation of tobacco in the northern States to an extent which it never would have attained in ordinary circumstances.

The principal variety of tobacco grown in the northern States is the Connecticut seed-leaf. It is ordinarily grown for cigar wrappers, and the larger and more perfect the leaf the more profitable is the crop. For smoking or chewing it is an inferior variety. In fact, it seems almost impossible to grow a good quality of chewing tobacco in the northern States. It is found much more profitable to grow a large, tough leaf, suitable for cigar wrappers, than to attempt to grow a smaller crop of a better quality.

## CENTRAL PACIFIC RAILROAD CO.

At the annual meeting of the stockholders of this company, held at their office July 13th, the President, Leland Standford, presented the following report:

*To the Stockholders of the Central Pacific Railroad Company:*

At our last annual meeting held October 8, 1864, I found occasion to congratulate you upon the progress of our enterprise, its condition and prospects. Though in all respects the progress, for reasons that will appear, has not been as rapid as we had anticipated, yet it has progressed fairly, and its present condition and prospects are not less bright than at our former meeting. Indeed, they are far brighter. Much of what we had hoped then has been realized; the financial problem which was then pressing upon us for solution has been solved, and the result is abundant financial means to press forward the work to its utmost development. Now, the question which addresses itself with most force upon our consideration is one of labor; this is gradually being answered satisfactorily. For want of funds we were not able to employ a large force of laborers in construction until the first of last January. From that time to this there has been employed in construction all the labor that could be obtained. For the months of January, February and March, the force, with great efforts to increase it, did not probably average above five hundred men, and they, owing to the wet weather, could not labor above half the time. Since then we have had more favorable weather, and an average force of about two thousand. At present, there is a force of about twenty five hundred men employed and the number is being daily increased, so much so that in connection with several favorable causes, we think it probable that the force this season can be increased to five thousand. An important element of labor is found in our Chinese population. Of this class of laborers there are now engaged in construction about two thousand. They are found to be good laborers and, at the price at which they are to be had, full as cheap as any other. Regular and prompt pay, with kind usage, secure their confidence, and it is probable, from the Chinese population of our State, we shall be able to obtain to the extent that white labor shall prove inadequate, the necessary force to prosecute the work vigorously. We are employing and shall employ all the white, Chinese, or other labor that offers.

It is now nine months since our last annual meeting. For the first three but little work was performed, and for the next three, for the causes above alluded to, not a great deal. Yet we have been able to complete the work to Clipper Gap, a distance of twelve miles above Newcastle, and have the work on the next twelve in so forward a condition that it will probably be completed and the cars doing business over it full as early as the 15th of September next. We shall then be operating in all fifty-six miles of road and have reached an elevation of 2,448 feet, or over one-third of the entire elevation to be overcome in crossing the mountains. Of the present force engaged in construction, the most of it, together with what it may be increased, can be placed as early as the middle of August on the work between Illinoistown and Dutch Flat, which place we expect to reach by the first of next April, and have much work done beyond that point. Indeed, by the time of our next annual meeting, should we not be disappointed in obtaining labor, we shall have the cars running to Crystal Lake, twenty miles above Dutch Flat, and within fifteen miles of the summit. Complete surveys have been made for this distance, and the work found of a more favorable character than had been anticipated. There are three corps of engineers now engaged in making surveys beyond this last-mentioned point, one of which will commence this week to survey from Donner Lake eastwardly. The principal object in making that survey at this time is that the work may be ready for construction as early as possible. I deem it important to commence the work of grading from Donner Lake eastwardly and laying the track without waiting until the road can be constructed from this side to that point. By pursuing the course indicated we may expect to have the entire road completed from this side to Salt Lake in three years from this season. The grading can proceed on the other side of the mountains without retarding the work on this, and by the time the season will permit the transportation of iron over the mountains at low freights next year, the railroad will have reached a distance on this side from whence iron can be transported by teams to where the track will commence on the other side for from ten to fifteen dollars per ton. There will be, of course, more cost beside this in construction, beyond what there would be if we waited until the road was constructed over the mountains; but this will be more than counterbalanced by the benefits to be derived from its use. Besides, while conscious of the immense benefits to be derived to the company by the use of a road on the other side, with the consequent increase of business by the settlement and development of the vast mineral region the road will penetrate, it should not be forgotten that our enteprise is one of a State and national character, and that we have a duty in this respect which will not permit us to do anything that is in our power to hasten its completion. As a pecuniary matter to the company, I am confident its benefits can not be exaggerated; and it should be a matter of pride, if possible, to overcome the Sierras and reach Salt Lake, to greet our brethren of the East upon their arrival there. It does not seem to me that there need necessarily to be more than three years from the present to witness this great and happy event.

That we are financially fully warranted in pushing the work to the extent proposed will be seen from our present assets, together with those to be derived from our National Government.

The act of Congress granting aid to the Pacific Railroad was beneficially amended at the last session of Congress by allowing the company to make their first mortgage bonds payable in gold coin, both principal and interest. This will make our first mortgage bonds among the most desirable securities, as they will be of the best to be offered in the market.

| | |
|---|---|
| We have now on hand Placer and Sacramento county bonds (gold)—eight per cent. | $238,500 |
| Bonds on which the Sate pays seven per cent. interest in gold | 1,475,000 |
| San Francisco county bonds (gold), seven per cent. | 265,000 |
| United States bonds, six per cent. | 1,258,000 |
| Making a total of | $3,236,500 |

On which the company draws an annual interest of $216,360.

In addition to this there will he due to the company on completion of the work to the station at Illinoistown, Government bonds amounting to $1.200,000; and which, in view of the speedy completion of that work, may be considered, for practical purposes, as assets immediately available.

Issuing first mortgage bonds, as authorized by act of Congress, though we should limit their issue to completed road, by the middle of September, and we shall have from this source, $2,458,000.

Beside, we are authorized to issue first mortgage bonds to the extent of one hundred miles of a completed line.

| | |
|---|---|
| Thus, it will be seen that the company have as assets, immediately available, without issuing first mortgage bonds beyond road constructed, bonds on hand—first mortgage bonds | $2,458,000 |
| Government bonds on work nearly completed | 1,200,000 |
| Placer, Sacramento and San Francisco county bonds, and bonds on which the State pays interest | 3,236,500 |
| Making a total of | $6.804,500 |

In consequence of the suppression of the rebellion, the Government bonds are appreciating in value; from the prosecution of the work our other bonds are also appreciating; consequently we have not thought it advisable to sell this class of bonds. To prosecute the work, aside from proceeds of bonds sold, we have made loans. With the means on hand and the Government bonds to be derived as the work progresses, and first mortgage bonds on one hundred miles in advance of construction, at will of the company, it is fully warranted in considering itself ahle to overcome the Sierras as rapidly as possible, and in undertaking the work beyond. It is not to be anticipated that there will he in the future any delay in obtaining the Government bonds when due.

The bonds on the first thirty-one miles were due last Septemher, but we did not receive them until the 12th day of May, though the most strenuous efforts were made to procure them at an earlier day. In consequence of injurious reports raised by the antagonists of our road, the bonds upon which the State pays interest were not available for use un=. the 1st of January, when the Supreme Court decided their legality. The bonds due from the city and county of San Francisco, from the pertinacious and unscrupulous opposition of our enemies, after much litigation were obtained on the 12th day of April.

No disposition has as yet been made of the lands of the company. It has been thought advisable before doing so to wait for the receipt of a patent. Over 50,000 acres have been listed to the company by the United States Land Office. As the railroad progresses the land will become more valuable; soon we shall find them yielding largely in the shape of freight. We are now close to a fine lumber region.

The general business of the road is constantly increasing; the gross earnings for the month of June amount to $31,456 66, though we were not fairly in condition to do a freighting business to Clipper Gap before the middle of that month. The road is daily increasing in its local business, as also the business over the mountains. With its further extension this will be increased until all is secured. The report of the Secretary will give a detailed statement of the business of the road since last annual meeting.

The construction of the Pacific Railroad will prove what our lamented President predicted—that our country will he the treasury of the world. The vast country west of the Rocky Mountains, with its teeming mineral wealth, will be settled np by an indutrious population that will develop its wealth. The Pacific coast will feel its exhilarating influence; the arts, commerce and agriculture will flourish; population will be increased, and there will be a numerous, powerful and prosperous people on this extreme west of our country, bound to the Union by interest and the strongest fraternal and patriotic ties. The whole nation, and in fact the entire civilized world, will feel the benign influence of the Pacific Railroad. With this great incentive, let your energies be applied with the utmost force to overcoming the gigantic obstacles you have to encounter, and complete the work to Salt Lake in 1868, and with new bonds help bind together our country, now so gloriously restored to peace. We have a Government and a country beyond compare. A Government of the people and for the people alone; a country devoted to freedom, lovely and grand; a soil and climate conspiring to furnish untold blessings. Let us rejoice that we have an opportunity to do something towards strengthening, aiding and developing one or all of them—to do all in our power in this respect. If we need further incentive, we shall find it in the best interests of our company.

## VIEWS OF FINANCIAL FUTURE.

We take the following article from the *Stockholder;* but the main part is from the *Chicago Tribune.* We give it as a decidedly amusing speculation upon financial affairs. There are some ideas in it correct; but we think no one need be afraid that the property, money and credit of the country will go circulating about the air like balloons:

The very fact that so many individuals and papers are writing and publishing on the subject of the finances during the next year, is an evidence of its engrossing interest, and of the anxiety which exists in the minds of thoughtful men. The views thus presented are important and worthy to be known. We offer no opinion of their value, neither of the aspect of financial affairs, until more is developed than is at present known. Prudence' however, is seldom an unseasonable virtue. In the opinion of the Chicago *Tribune*, the last dollar of the last govarnment loan is taken, and it will probably be six months before another can be put on the market. It thinks there is no possibility, certainly no probability, that in the next half year, the Secretary can do anything toward reducing the amount of the circulating medium now afloat, the amount of which, it states, as exceeding $850,000,000. Thus the Government being unable to make any move toward the redemption of its notes, and the banks being impelled by strong self-interest, and unwilling to do any thing but push out the last dollar in their vaults—the pockets of the people also being full of money, it asks, What is to be the tendency of affairs? In its opinion, no power can prevent the occurrence of a plethoric money market, and a period of wild, visionary and fatal speculation. All conditions which invite it are fulfilled Heretofore the loan market, in which the Government has been the largest and most profitable customer, has acted as a safety-valve by which a dangerous accumulation, tending to invite speculation, has been prevented. That valve has now been shut down. The same print further says:

It is probable thst all Government bonds will rise to a slight premium. If they do, and to a less extent if they do not, the inquiry will be soon on every side: "What shall I do with my surplus money? How can I invest it so as to get a good return?" When these ominons sonnds strike the public ear—an evidence that capital is begging for customers—the day of specnlation is not far off.

It is probahle that railroad stocks, as they have long been the favorites of the speculative classes, may feel the first impulsion; and from them the motion will be communicated to whatsoever else of real or fictitious value men are accustomed to deal in; and, perhaps, before the people are aware of the tendency of affairs, or have comprehended the true reasons of the movement, the country will be in a blaze of excitement, equal to, if not far surpassing, the great *furore* of March, 1864, when it was the rule in New York, and to a less extent in Chicago, for every speculator to make a fortune in a week. We think we see plainly enough that mining, oil and manufacturing stocks, as well as grain and all the great agricultural staples, and possibly city lots, will be blown up like so many bubbles, and that the entire property of the country will be whirling in a vast aerial eddy, from which, before the storm is over, the wrecks and fragments of fortunes destroyed and enterprises foundered will strew the ground as thickly as down trees in the track of a windfall.

There is another agency, in addition to those that we have mentioned, that will contribute to this dreadful result; and that is the small bonds of the various loans that have been taken by the people. We do not know the amount of the "fifties," "hundreds," and "five hundreds" that have been issued; bnt the sum is immense; and we do know that in a time of either panic or speculative excitement, these bonds, now qnietly reposing in bank-vaults, chest-tills, bureau-drawers, and breeches-pockets, waiting the semi-annual payments of interest, are only so many pieces of paper that will form an addition to the circulating medium. Stringency will bring them forth to pay debts, and the desire to make money by a speculation will put them flying in the air like so many autumn-leaves.

Add them to the eight hundred and fifty millions of bank and national currency, and we have an amount four times as great as that required, in a sound and healthy condition of affairs, to do the entire bnsiness of the country! When, then, we remember how small an addition to the bank-paper of the rormer speculative periods sufficed to upset all prudent calculations, and give largely increased and purely fictitious values to all the country contained, we may calculate with reasonable certainty the extent and violence of the excitement that is approaching. Look out for the coming storm! He is the safe man who has all anchors down to meet it.

—The traffic on the Atlantic and Great Western Railway for the month of July was as follows:

| | |
|---|---|
| 1865 | $505,523 |
| 1864 | 335,098 |
| Increase | $263,425 |

☞ The amount of funds invested by the commissioners of the New York city sinking fund is said to equal one fourth of the entire debt of the city.

## IRON IN THE NORTHWEST.

The following letter from Dr. Lamborn, the accomplished Secretary of the Iron and Steel Association, who has been lately visiting the iron regions of Lake Superior, will be found exeeedingly interesting and suggestive:

The proper development of the iron industry of the United States demands a steady and abundant supply of first-class charcoal metal, suitable for working into car wheels, cannon, tyres for locomotives, boiler plate, and for the vast present and prospective requirements of the steel maker in the departments of cast steel, puddled steel, and above all, for use in the Bessemer or Pneumatic converter. The relative quantity of charcoal to mineral coal iron produced in the United States has decreased with the increasing production of the vast anthracite furnaces of Eastern Pennsylvania and with the discovery of pure bituminous coal in Ohio, while scores of charcoal furnaces scattered through the Eastern States have gone out of hlast through the appreciation in the value of timber land, caused by the demand that has sprung up for fuel for other purposes, through the building of ways of internal communicatioo and the demand for surface for agricultural use. These causes are year by year making the Eastern States less suitable for a large charcoal iron production. Where, therefore, are our manufacturers in the early future to look for their supply of this necessary raw material? England sends to Sweden, Norway, Russia and Nova Scotia for her best brands.

If we follow around the same northern isothermal zone in which these countries are located, we reach upon our great lakes a region designated by nature in the most extraordinary manner as our future domestic source of a vast amount of excellent charcoal iron, and it is with no desire to disparage the importance and value of the charcoal district of Northern New York, Connecticut, Northern New Jersey, and Central and Western Pennsylvania, that this letter is written, hut rather with the hope of drawing the attention of the skillful ironmasters of those districts to a most promising field for enterprise and the exercise of their peculiar knowledge—a field already inviting development, and which must continue to increase in importance as long as the iron and steel industry of the United States continues to enlarge. The belt of country along the southern shore of Lake Superior, extending 40 to 60 miles into the States of Michigan and Wisconsin, is one of the richest mineral regions on the globe. A district producing copper on the north already sends to market annually some 16,000 tons of the metal—a region producing with argentiferous galena and sulphide of copper, silver and gold, is in process of development, southward of this copper belt, while from Lake Monistique, in Schoolcraft county, to a point as far west at least as the Penokee iron range, 100 miles westward of Ontonagon, are found immense deposits of iron ore of all varieties common in igneous rocks, magnetic oxide, red hematite, brown hematite, as well as the water formed bog ores. These first mentioned ores, where developed, occur in vast beds adjoining hornblendic dykes and in chloritic slates, and they exist in such quantities that they may be considered inexhaustible.

One-eighth of all the iron now made in the entire United States is dug from the mines of Marquette county, and yet ten years ago a piece of Lake Superior copper was a curiosity to most of our practical metallurgists. With the completion of the Sault St. Marie Canal, which was opened ten years ago this month, the projects for developing the iron ore trade assumed a definite shape. The few tons of mineral that had been carted around the portage of the mouth of the lake had proven its value, and the first year saw 1,445 tons sent below for smelting.

The enlargement of the trade has heeu steady and rapid, as the statement wilt show:

| | | | |
|---|---|---|---|
| In 1855..... | 1,445 | tons were | exported. |
| In 1856..... | 11,594 | " | " |
| In 1857..... | 26,184 | " | " |
| In 1858..... | 31,135 | " | " |
| In 1859..... | 67,679 | " | " |
| In 1860..... | 116,948 | " | " |
| In 1861..... .... | 45,500 | " | " |
| In 1862..... | 115,620 | " | " |
| In 1863..... | 185,275 | " | " |
| Io 1864..... | 235,125 | " | " |

Making a total of 834,534 tons which, assuming the ore to yield an average of 60 per cent. (tbe standard desired by shippers is a yield of 66⅔ per cent. in the furnace), would give 500,750 tons of cast iron. The development of the manufacture of pig from charcoal, in Marquette county, has been even more remarkable, as the difficulties to be encountered in building large structures, erecting new machinery, and collecting necessary labor in a distant and hyperborean region are numerous and serious.

The earliest iron made was produced directly from the ore in what is known as the Catalan Forge. This manufacture was commenced in 1847 by Everett & Jackson, at the Jackson Forge. After it followed the Marquette Forge, and the Collinsville Forge, and lastly the Forestville Forge, all in the same vicinity, near Marquette. They made iron with more or less success for a few years, but are now in ruins, or so greatly dilapidated tbat much time would be required to repair them.

The production of pig iron from charcoal commenced at the Pioneer Works, near the Jackson Mine, in 1858; 1,627 tons were sent to market that year. This manufacture has increased by the erection of new furnaces, until the present Pioneer, the Collinsville, and Forestville, the Morgan, the Northern, and the Greenwood Furnaces are in activity. The progress of the trade has heen as follows:

| | | | |
|---|---|---|---|
| In 1858..... | 1,627 | tons were | exported. |
| In 1859..... | 7,258 | " | " |
| In 1860..... | 5,660 | " | " |
| In 1861..... | 7,970 | " | " |
| In 1862..... | 8,500 | " | " |
| In 1863..... | 8,908 | " | " |
| In 1864..... | 13,832 | " | " |

Up to the end of 1864, therefore, 33,845 tons of pig iron had been sent to market from Marquette county. By comparing the production of this region with that of other iron districts, it will be found that it produced in 1864 more pig metal than Connecticut or Massachusetts in the same year, and 60 per cent. more than New York in 1850. Reckoning ore and metal together, the mines of Marquette threw into consumption in 1864, 154,905 tons of metal, or 3-5ths as much as the total pig iron production of the United States, according to the census returns of 1850, and, as above stated, ⅛th of all the pig iron produced by the United States in 1864.

Regarding the method and cost of mining and smelting in this new and isolated region, a few facts will, I am sure, be welcome to our Eastern makers, as well as to that numerous class of Western ironmasters who only know the district through the thousands of tons of rich and pure ore that reach their furnac from within its limits. I shall not pause to discuss the interesting geological features of the country surrounding the iron beds, nor the no less interesting points connected with the genesis of the ore itself, but will proceed at once to a consideration of the economic features of the mining and export of the merchantable mineral. The Jackson Company, which exported last year 70,937 tons; the Cleveland Company, which exported 58,838 tons, and the Lake Superior Company, which exported 83,848 tons, are the three principal companies now in operation. The Pittsburgh and Lake Angoline, the New York, the Parsons, and the Marquette mines, have sent more or less ore to market, while a dozen others are in process of development. They are all situated in what is known as the Agoic range, and those first mentioned are between 14 and 17 miles from the harbor of Marquette.

The total quantity of ore already extracted, chiefly from the three first mines, is not less than 925,000 tons, yet nothing but the "surface" or "patch work" has yet been done, all the mineral has been quarried from shallow openings in the sides of the iron hills; no pumping machinery has yet been erected, and only recently have adits for drainage been begun. The surface rock indicates in many points that but a portion of the most easy obtainable ore has been quarried, and it is safe to estimate that several millions tons are proven to exist in the three or four oldest mines, with every likelihood of vast quantities in the beds below water level. In addition to this are bundreds of localities where iron is known to exist in a belt of 30 miles in length, and at more than a dozen localities, companies have been formed or mines commenced. Great skill is not necessary in working these ore quarries. The operation consists in blasting from a ledge of ore large masses, which are subsequently broken into fragments by other blasts, by the sledge, or sometimes in the most refractory cases by means of a fire of huge logs.

At the Jackson mine a hole 18 feet in depth and 2 inches in diameter, loaded with powder and exploded last March, brought down 4,000 tons of ore. The holes are all bored with good steel drills, managed by two strikers and one turner. The fragments of ore are loaded into one-horse carts, hauled a few hundred feet to the railroad, thrown into 6 ton 4-wheel cars, and carried to the wharves at Marquette, where they are unloaded into the pockets, or hoppers, or shoots and thence into the vessels that transport them into the furnaces on the lower lakes; and are transferred by wheelbarrows from the hoppers to the vessels or steamboats. The laborers at the mines receive $2 per day, work ten hours, and pay $20 per month for their board. The average product of each laborer—including all whose names are on the pay roll—miners, drivers, trackmen, repairers, etc., is 2 to 2½ tons of ore per day per man. In some cases an average of five tons per day per man has been taken out by a small gang. 91 cents per ton freight is paid on the railroad to Marquette, and the price of ore on the vessels is now $5 per ton.

The mines are generally worked by the companies owning them. One exceptional company leases its mine for 20 years, paying 20 per cent. per ton royalty, and contracting to take out 10,000 tons per year. Two means of transport to water communication are now offered to the mines of this region—one 14 to 17 miles long to Marquette, by the Marquette Bay des Noquettes Railroad; the other, from 62 to 65 miles long, by way of the new Peninsular road, which has just been completed for the purpose of carrying ore to Escanaba, on

Little Bay de Noquettes, an inlet at the head of Green Bay. The cost of freight on this route is $1 50 per ton from the mines to the vessels, and it reaches a harbor on the lakes which is said to be open four weeks longer than that of Marquette, and is so much nearer the lower ports that ore may be shipped at, it is thought, $1 per ton cheaper than by the Marquette route; the saving being in time, in tolls, and in towage passing through the Sault St. Marie Canal.

No ore had yet been shipped by this route, but several hundred tons were, at the time of my visit, awaiting the arrival of a vessel. The shipping arrangements here are of the most excellent character. 20,000 tons may be stored in the pockets, and it is claimed that a vessel may be loaded in one hour after reaching the port. Ships drawing 14 feet of water may lay under the shoots, while the Sault Canal carries only 10 to 11 feet of water, which restricts the trade of Lake Superior to vessels below a certain tonnage The freight from Marquette to Cleveland is $3 per ton; thence to Pittsburgh $2 to $2 50, so that ore may be laid down at the great iron manufacturing city of the Union at from $10 to $11 per ton The lowest rates that have prevailed, I am informed by my friend, H. B. Tuttle, of Cleveland, were those of 1851, when ore could be placed in Pittsburgh at $7 per ton, as follows: Cost at Marquette, $2 50; freight to Cleveland, $2; freight thence to Pittsburgh, $3; insurance, commission, etc, 50c; total, $7 00.

In the manufacture of pig iron, we find in Marquette County the metallurgic traditions and customs of New England predominating. The iron workers have migrated westward as nearly as possible on the line of their own parallel of latitude Pennsylvania has comparatively few representatives either among those who furnish capital and those who furnish skill. The furnaces are all charcoal, and driven in some cases by water, which is abundant and can be used during the severest winter—and in some cases by steam—taking the gas from the furnace for fuel. The blast is driven in at two pounds pressure per square inch, and at a temperature of 620 deg. Fah. The charcoal is made almost entirely in kilns 26 to 30 feet in diameter, and 25 feet to 30 feet high, shaped like a straw bee-hive, and capable of burning 25 or 30 cords in seventeen days; 20 to 25 of these kilns are required for each furnace, and they are scattered through the forest in the neighborhood of the heavy timber. Maple and birch, with some hemlock, are the woods charred—2½ cords are found to produce 100 bushels.

The long winters, with their five consecutive month of snow, during which charring in pits is attended with many difficulties, render this plan the most expedient. Charcoal is now being delivered at the furnaces at 11c per bushel, by contract. The flux used is a lime stone found near the railroad, and which does not cost over 35c per ton of iron. The ore produces from 55 to 65 per cent, a soft hematite from the Jackson mine being the favorite mineral of all the smelters. It requires 125 bushels of charcoal to reduce one ton of iron, and the furnaces produce from 10 to 18 tons in 24 hours The cost of making iron is now about $30 per ton, but it is asserted that under the most favorable circumstances iron has been made at $14 per ton, and contracts have been entered for its manufacture by furnace owners with their managers at $16 50 per ton delivered on board at Marquette. The foregoing facts will enable any one familiar with the iron business to judge the relative advantages of the region under discussion as a locality for the production of pig iron.

The future of the manufacture is encouraging, and in case the internal revenue taxes, joined with an adequate tariff, do not force the business across the Atlantic, it will develop even more rapidly in the future than in the past. Land from which may be cut an average of 50 cords of wood per acre, may be bought at from $2 50 to $4 00 per acre in hundreds of places along the shore of the lakes. We have seen that there are already two competing lines of railway leading from the mines to the lakes The lakes are free to all navigators who may desire to carry ore, and in five years there will be from twelve to fifteen mining companies competing for the market. This combination of circumstances will secure the delivery of ores at any point on the shore of the lakes that may be selected, at rates most advantageous to the manufacturer, while the various increasing uses for charcoal iron will always cause an ample demand for the product of the furnace.

The iron trade is now oppressed by such a combination of imposts on metal of foreign and domestic production, that the future seems gloomy enough for every one connected with the business; but if we could hope from our Government for one half the care and protection given by England to her manufactures of iron and steel, during a period one half as long as was necessary to develop her works properly, results of an extraordinary character would ensue. A careful study of the vast natural resources of Michigan, Wisconsin, Missouri, Indiana, Ohio, and Pennsylvania, and a comparison with the iron making facilities of Great Britain, show that we would be able to supply our home consumption at rates unprecedentedly low, and at the same time sell our iron and our steel in all the markets of the world—even to the artisans of Birmingham, Wolverhampton and Sheffield.

ROBERT H. LAMBORN,
*Sec'y American Iron and Steel Association.*
DETROIT, Mich., June 9, 1865.

## WEST VIRGINIA.

An oil-strike is reported at the Swan Well, on the Guyandotte, eight miles above Bartonsville, Cabell County. The Musgrave oil-well, at Field's Creek, has struck a salt-vein; 35,000 gallons of the briny fluid have been obtained. A Providence company have reached 560 feet in their well, in Burning Spring Hollow, below Camp Piatt. The Oil Break Petroleum Company, of West Virginia, has commenced operations on Blue Creek. A gentlemen from Pittsburgh, who is now in the Kanawha Valley, states that he visited an old salt-well on Blue Creek, and with a tin cup dipped the pure oil from the water. There are several wells going down on Blue Creek, and the parties feel confident of striking oil at 600 feet. The prospects for several miles up the creek are flattering, and eastern oil speculators are already buying and leasing quite a lot of territory in that neighborhood. Being but a short distance from Elk river, the facilities for shipping the oil to market are very good. A visitor to Burning Springs, last week, counted twenty five producing wells. The Longacre Well is giving forty barrels per day. On Upper Burning Springs there are two wells producing—one ten, and the other twenty five barrels per day. The Whetzell Well pumps five barrels; the West Jersey Oil Company, fifteen; the Old Reliable, fifteen. The new Cozens Well pumped forty barrels the first six hours.—*Oil News.*

## INSURANCE COMPANIES IN NEW YORK STATE.

We have received from the New York Insurance Department advance sheets of the department's report, from which it appears that the amount of capital invested in joint stock insurance companies, has been increased over five million dollars during the year. The following table exhibits the increase in the number, capital and premium income for a period of seventeen years:

TABLE.

Showing the progressive net increase in the number of New York State joint stock fire insurance companies, with their aggregate capital and premium income, from the year 1848 to 1864 inclusive:

| Year. | | No of Co's. | Am't of capital. | Premium increase |
|---|---|---|---|---|
| 1848—M. Fillmore, | Compt.. | 24.. | $5,421,700 | not returned. |
| 1849—W Hunt | do .. | 24... | 5,511,019 | do |
| 1850— | do .. | 31... | 7,006,010 | do |
| 1851—P. C. Fuller | do .. | 5... | 7,156,010 | do |
| 1852—J. C. Wright | do .. | 48... | 8,506,010 | do |
| 1853— | do do | .. 64... | 13,056,010 | 4,622,270 59 |
| 1854—J. M. Cook | do .. | 67... | 13,553,010 | 4,622,270 59 |
| 1855— | do do | .. 69... | 13 852,010 | 5,018,446 68 |
| 1856—L. Burrows | do .. | 73... | 14,902,010 | 5 570,440 90 |
| 1857— | do do | .. 83... | 16,731.010 | 5 961,404 87 |
| 1858—S. E. Church | do .. | 86... | 17,13 .010 | 6,.46,436 76 |
| 1859— | do do | .. 98 .. | 20,007.010 | 6 599,360 96 |
| 18 0—Wm. Barnes, | Sup't.. | 96.. | 20,4-2,.60 | 6,271,525 52 |
| 1861— | do do | .. 95 .. | 20,382,.60 | 6,.27,736 46 |
| 1862— | do do | .. 96 .. | 20,432,860 | 7,712,190 88 |
| 1863— | do do | ..101... | 28 632 860 | 10,181 030 52 |
| 1864— | do do | ..197... | 28,867,670 | 15,618,603 82 |

It must be borne in mind, however, that the average rate of fire premium was not increased at all during the year, but actually declined, and that the augmented premiums consequently resulted entirely from an increased amount of business. The fire premiums of the New York joint stock companies increased, as above stated, from $10,108,030 52 in 1863, to $15,618,603 82 in 1864—the ratio being 53.4088, which is the highest ever known in the history of these corporations. The number of policies by New York life insurance companies increased from 20,757, in 1863, to 28,782 in 1864, and the amount insured from $140,628,427 10 to $194,819,354 45. The gross assets of all the New York companies, fire, marine and life, increased during the year from $82,488,066 07 to $103,453,772 76.

The grand average per centage of losses to premiums in all the New York joint stock fire insurance companies has ranged, during the last five years, from 41.15 in 1863, to 60.44 in 1862. For every $100 premium received in 1862, over $60 was paid for losses. When the individual companies are taken, and the losses to premium averaged for the five years combined, the range of per centage oscillates from 18 64, in the case of the American, to 95.99, in the case of the North-western and when these five years are separated, the swing of the pendulum extends from 0.80 per cent. in the case of the Commerce, Fire, in 1863, to 259.81 per cent, in the case of the Buckman, in 1862. Averaging all the companies, for the five years combined, 1860 to 1864 inclusive, fifty have lost less than fifty cent of premiums, and fifty-one more than fifty per cent. of premiums; again, separating the years, the number of companies losing more and less than fifty per cent. of premium was as follows:

| Year. | No. of Companies. | No. of Co's losing over 50 per cent. | No. of Co's losing less than 50 per cent. |
|---|---|---|---|
| 1860..... | 76 | 51 | 45 |
| 1861..... | 96 | 46 | 49 |
| 1862..... | 96 | 55 | 31 |
| 1863..... | 101 | 21 | 80 |
| 1864..... | 180 | 63 | 46 |
| Average.. | 99.20 | 47 | 52.20 |

It is thus demonstrated beyond any cavil and contradiction, by the experience of the last five years, that a very large number of

# COUPON AND LOCAL TICKETS!

## CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

**CONSECUTIVELY NUMBERED**

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD.


## GOVERNMENT TRANSPORTATION.

GENERAL ORDERS No. 17.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., March 16, 1865.

1st. For the purpose of producing uniformity in the Transportation service and guarding against abuses, blank books of Transportation Orders will hereafter be issued from this office to the Chief Quartermaster of each Department, to be by him immediately furnished to each officer under his order entitled to issue the same; after the receip of which no other form will be used, unless in emergencies when the prescribed blank form cannot be had, and then the reason for not using it must be stated in the order.

These blank orders will be numbered and registered in this office in such manner that there will never be two orders of the same number in circulation; they will be charged to the Chief Quartermaster to whom sent, who will in like manner charge and hold responsible his subordinate officers.

On exchange of posts, or on transfer to another officer, like receipts must be taken and forwarded to the Chief Quartermaster of each Department.

2d. Within five days after the end of each month, a concise report will be made to the Department Quartermaster of the number of orders issued, the number cancelled by error (which must accompany the report), and the number remaining on hand, with a statement of the amount of transportation furnished in the month; which report in a condensed form (accompanied by the orders so cancelled) will be by him immediately transmitted to the Quartermaster General, under envelope, endorsed on margin "Rail and River Transportation."

3d. The marginal register should contain the substance of the order issued, and will be preserved by the officer issuing for his own protection, or return to the Department Quartermaster or this office, as may be hereafter required.

*Care should be taken at all times to keep on hand a sufficient supply of these blank orders*, which can be obtained upon application to the proper Senior or Department Quartermaster.

4th. Unless in extraordinary circumstances, all rail and river transportation, passenger and freight, at any post, will hereafter be under the control and management of a single officer, on whom requisitions will be made by other officers requiring transportation.

5th. When more than five persons, in one party, are to be transported over one road, or a continuous line of roads, separate orders for transportation must be issued for each road to be passed over. These orders should be received on the train instead of tickets, and are to be receipted by the party named in the order, and given up on the cars—the officers, or persons in charge, filling the receipt with the number actually carried. Five persons, or a less number, may be carried over a continuous line of roads upon a single order for transportation, and this order may be exchanged at the starting-point for tickets over the entire route.

6th. Settlement should not be made nor vouchers given to railroads on orders for passenger transportation properly belonging to other roads, but the *passenger* accounts for each road should be made up separately in the name of the roads to which they belong.

7th. Appletons' Railway Guide for January, 1865, will be used as a standard for indicating routes and fixing distances, unless the actual distance is proved to be less, in which case settlement will be made on the basis of actual distance. Where this Guide cannot be more readily procured it can be furnished from this office.

8th. When a number of troops are to be transported from any point to any other point, on the same day or train, it should be done in squads as far as practicable. A single transportation order, or set of orders, should be given to the ranking officer, or most responsible person of the several detachments.

9th. Blank books of Free Transportation Orders will also be furnished, to be used on boats belonging to, or in the service of, the Quartermaster's Department, or on railroads operated by the Government. The free passes in these books will be given to persons entitled to receive Government transportation, and should not be issued without designating on the order the boat or road on or over which the person is to be transported. The marginal registers in these books will also be preserved for return to the Department Quartermaster, or to this office, as may from time to time be required.

Should the route to be traveled be in part over roads or on those owned by private parties or companies, care should be taken that Free and Pay Orders are given as the case may require, or such requisitions furnished as will enable the party entitled to transportation to procure it at points where pay transportation commences.

10th. To warrant the granting of transportation, except in cases specified by Regulations or General Orders, published for general information, the person demanding the same should show a requisition or order from competent authority requiring the movement by public conveyance the performance of public duty.

The original requisition, when not necessarily required by the officer presenting it, should be retained by the officer furnishing the transportation; in other cases, a certified copy or necessary extract from the order should be furnished to, and preserved by the officer granting transportation as his proper authority therefor, and a certified copy of the same must be endorsed on the back of the order.

11th. When the cost of transportation is to be reimbursed to the Government, as in the case of sick and furloughed soldiers, the required certificate should not only be made upon the furlough or order, but the transportation order should also be endorsed on the back substantially as follow: "The within transportation, furnished under General Order ——, and the proper officers duly notified. —— —— A. Q. M."

12th. When transportation is granted to persons not in the military service, full explanations therefor should be given

13th. Orders for transportation should give the name of the party to be transported, or if there are several, then of the officer or person in charge, and state the number of men to be transported.

Orders for "one man," "ten men," and the like, without designating any name, are improper

14th. The receipts for transportation should be filled up in ink by the officer or person named in the order before signing, and if he cannot write his name, there should be a witness to his mark.

Names and places should be written distinctly in full, and not abbreviated.

15th. Duplicates of orders for passenger transportation should not be issued.

16th. When a requisition calls for transportation to any given point and return, the order should be issued to the place of destination, and the return transportation should be obtained at that point, provided it can there be procured.

17th. Upon the form of order now issued should be presented all the facts necessary to enable an auditing officer to decide as to the regularity or propriety of the order, so that it may be paid by any authorized disbursing officer.

18th. Erasures, interlineations, or alterations, if made against the interest of the Government, should be explained on the order by the issuing or other competent officer; otherwise, the transportation should only be settled for in accordance with the order before change or modification.

19th Transportation by water being generally the cheapest should be selected when consistent with the interests of the service All transportation should be furnished by the shortest practicable route, unless a different route is indicated in the order which directs the movement. Where there are two or more competing routes without material difference in distance or time, the business should be divided in equitable proportion between them, the distance for which compensation is made being estimated by the shortest practicable route.

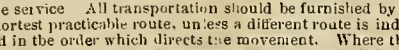
20th. In no case is subsistence furnished by the Quartermaster's Department.

21st. The good of the service requiring that railroads should obey the requisitions of officers properly authorized to demand transportation, in case compensation is made by the Government for illegal or unauthorized transportation so required, the officer making the requisition or issuing the order will be charged therewith, or if not paid by the Government, the railroad will be entitled to recourse upon such officer.

By order of the Quartermaster-General.

LEWIS B. PARSONS,
*Colonel, and Chief of Rail and River Transportation.*


## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

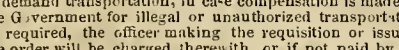
H. W. BROWN & CO.,
No. 92 Broadway, Cincinnati.

J. J. HOUSTON. General Freight Agent,
my11 Pittsburg. Pa.

## Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:10 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO



## STEAMSHIP COMPANY.



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | | |
|---|---|---|
| WASHINGTON | 3,204 tuns, | 900 horse-power. |
| LAFAYETTE | 3,204 tuns, | 900 horse-power. |
| EUROPE | 3,254 tuns, | 900 horse power. |
| FRANCE | (afloat), | 900 horse power. |
| NAPOLEON III | (afloat), | 1,100 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its exuivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building) | 3,412 | ——— |
| ENGLAND (now building) | 3,430 | ——— |
| SCOTLAND (now building) | 3,430 | ——— |
| ERIN | 3,310 | Grace. |
| HELVETIA | 3,315 | Prowse. |
| PENNSYLVANIA | 2,872 | Grogan. |
| VIRGINIA | 2,872 | Lewis. |
| LOUISIANA | 2,166 | Axplett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to
WILLIAMS & GUION, No. 71 Wall street.

For steerage passage apply to
640* WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN | $90 00 | STEERAGE | $30 00 |
| First Cabin to London | 95 00 | Steerage to London | 34 00 |
| First Cabin to Paris | 105 00 | Steerage to Paris | 40 00 |
| First Cabin to Hamburg | 100 | Steerage to Hamburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G DALE, Agent,
640* No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR ..... 2,595 61-95 tuns.
WISLIAM R, BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
640* JAMES A. RAYNOR, No. 10 Barclay street.



## CENTRAL RAILROAD
—OF—
## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,
Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p m.—For Easton, Scraoton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twedty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); 11. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

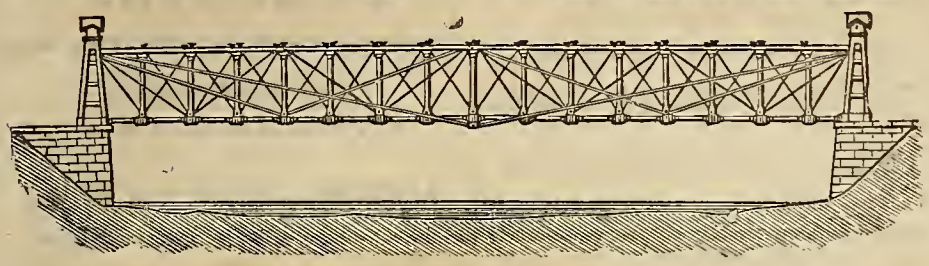
JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, **FINK'S PATENT IRON BRIDGE**, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use requires no repairs, and no adjustment, but is perfectly adjustable.

**For plans and particulars, apply to**

mar. 4, '63. 1y. **Letter Box, 1362.** **C. J. SCHULTZ, Pittsburgh, Pa**

---

**HOLENSHADE, MORRIS & CO.**

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

**Nos. 170 to 180 Columbia Street, bet. Elm and Plum,**

**CINCINNATI.**

**BRIDGE BOLTS,** Rivets [illegible], Sc[illegible]rews, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines. 419 y 1

---

**KNOX & SHAIN,**

**Engineering and Telegraphic**

INSTRUMENT MAKERS

**PHILADELPHIA.**

---

JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

CELEBRATED WHEELS

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

In the best Manner at the Shortest Notice, and on the Most Reasonable Terms.

---

Manufacturers, Importers & Dealers

—IN—

**RAILROAD, CAR,**

—AND—

**MACHINE SHOP**

**SUPPLIES,**

—AND—

**MACHINERY OF EVERY DESCRIPSION**

**47 West Front Street, Cincinnati.**

PERKIN LIVINGSTON & POST

---

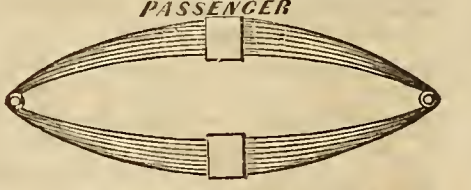
RAILWAY SPRINGS.

**FREIGHT**

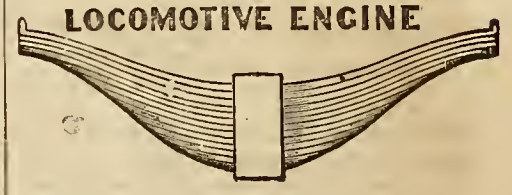




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS,**

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place. New York.

---

**W. M. F. HEWSON,**

## STOCK BROKER,

**No. 21 West Third Street,**

**CINCINNATI.**

Buys and sells Stock, Bonds and other Securities on Commisson only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by wrunning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerons points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest. Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $2,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH, *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't. Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miam. and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M. |

☞Sle ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P M. |
| Indionapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Bur net House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Shuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis. Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago n advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicaeo, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtaine at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Age t
C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2 MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—¾ to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East a Wes

WM. EARNS Supt

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, AUGUST 31, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| Morrow Accommodation | 5:20 P. M. | 7:45 A. M. |
| *Atlantic & Great Western—* | | |
| Morning Express | 9:40 A. M. | 7:30 A. M. |
| Night Express | 10:50 P. M. | 6:30 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Toledo, Detroit and Huntsville | 5:00 P. M. | 12:50 P. M. |
| Richmond and Chicago | 6:00 P. M. | 12:25 A. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | | 7:55 A. M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M. |
| Indianapolis & Cambridge City | 6:00 A. M. | 10:05 P. M. |
| " " " | 4:00 P. M. | 12:25 P. M. |
| Eastern Night Express | 10:50 P. M. | 7:50 A. M. |
| Mail and Express | 9:40 A. M. | 6:30 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Springfield and St. Joe Express | 1:00 P. M. | 5:07 P. M. |
| St. Louis and Chicago Express | 10:00 P. M. | 5:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 5:15 P. M. | 8:20 A. M. |
| Harrison Accommodation | 9:30 A. M. | 8:40 P. M. |
| Chicago and St. Louis Express | 7:15 A. M. | 9:00 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 6:00 A. M. | 10:00 P. M. |
| Connersville, Cambridge City & Indianapolis Express | 4:00 P. M. | 12:25 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A. M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 7:45 A. M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:12 P. M. |
| Evening Express | 2:35 P. M. | 6:00 A. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapoli & Cincinnati Roads, are run by Vincennes me which is 12 minutes slower than Cincinnati time.

## RAILROADS REQUIRED IN THE UNITED STATES.

This is a difficult problem to solve, and yet we can come very nearly at a solution. The amount of railroad required in a country is the result of compound ratio, composed of, 1st, surface, 2d, products, which depends on agriculture and manufactures; 3d, population, which is, perhaps, a more certain criterion than either of the others. A criterion of what is sufficient railroad accommodation may be determined by two *criterio:* 1st. When all the products and passengers of a given section are moved without delay; 2d and when this is done, at such moderate cost that the railroad companies receive but a moderate profit. There are three States of the Union, where these objects are accomplished so far that there is very little room for new railroads. These States are Massachusetts, Pennsylvania and Ohio. By making a little table of these, in reference to surface and population, we shall get very nearly the *ratios*, by which we can determine what the new States require.

| | Railroad. Miles. | Sur'c. Sq. mls | Ratio. | Population. | Ratio. |
|---|---|---|---|---|---|
| Massachusetts | 1,350 | 7,800 | 1 to 6 | 1,231 000 | 1 to 9,000 |
| Pennsylvania | 2,600 | 46.000 | 1 to 18 | 2,906,000 | 1 to11,000 |
| Ohio | 3,160 | 39 064 | 1 to 13 | 2 340,000 | 1 to 8,000 |
| Aggregate | 7,110 | 93,764 | 1 to 13 | 6,477,000 | 1 to 9,000 |

We see here that while the ratio of surface ries a great deal, even in populous States, that of *population* remains remarkably steady. In fact, 1 mile of railroad to 10,000 people is a ratio for the construction of railroads, which is determined by experience, with so much accuracy, that it may be relied on as a safe criterion. Taking this as a criterion, and knowing very nearly the population of the new States in 1870, we can determine what number of miles of railroad they may have in 1870, with due regard to the safety of capital and the demands of the people.

The following is a table of what railroads may be made with safety in the next five years:

| | Population 1860. | Population 1870. | Miles of railroad. |
|---|---|---|---|
| Michigan | 749,000 | 1,050,000 | 1,050 |
| Wisconsin | 775,000 | 1,200,000 | 1,200 |
| Iowa | 674,000 | 1,300,000 | 1,300 |
| Minnesota | 171,864 | 4 0,000 | 400 |
| Missouri | 1,182,000 | 1,500,000 | 1,500 |
| Kansas | 107 000 | 400,000 | 400 |
| Nebraska | 28,000 | 200,000 | 200 |
| | 3,686,000 | 6,000,000 | 6,050 |

The table of increased population has been constructed with due regard to the fact that the losses of the war will result in a downward ratio of increase. Nevertheless we believe that the actual increase in 1870 can not be less than we have stated it above. If so, 6000 miles of railroad on the these sections for 1870 will not be too much in reference to both the demands of the people and the profits of capital. The number of miles now constructed in these States does not exceed 2500. Hence there is abundant room to construct 3500 miles of road *in the next five years in those States* if the location and adaptation of the roads be made with prudence and sagacity. Of course they will not be proportioned exactly in the manner of the above table; for in some cases a continuous line must be made through several States. The *surface* of the above States is about 400,000 square miles, and the population in twenty years will be 15,000,000 people, who will require 15,000,000 miles of railroad. We see, therefore, that the railroad business is not finished by a great ways; and that there is no prospect it will be for half a century to come. But the centre and activity of railroad construction is now transferred to the Mississippi, and it will go on till it passes the Rocky mountains. But that time is yet distant. In the meanwhile there is abundant room for the employment of capital, labor and engineering talent. The cessation of the demand for Government loans will cause a large amount of money means to overflow into other pursuits. Railroads and manufactures will employ a good deal of surplus capital; and all the enterprises of the country will spring into new activity.

In regard to the ratio of 1 mile of railroad to 10,000 people: It is curious that on referring to whole amount of population and miles of railroad in the United States, the rates for the whole country is almost exactly the same, —30,000,000 of people give 30,000 miles of railroad.

## THE CINCINNATI TUNNEL—WHAT SHALL BE DONE WITH IT?

Our readers, in several years past, remember that we have always been in favor of the Tunnel; not necessarily of the *short line*—competing so closely, and (independent of the Tunnel) so unnecessarily with the Dayton and Hamilton road; but of the Tunnel *per se.* They have also seen how, when the work had progressed a good ways, and the tunnel was one third completed, it was abandoned, and has been several years, lying in a stagnant condition. Last week we noticed the fact, the *New York Central* has got control of the route, from Sandusky, by the Dayton and Sandusky Railroad, and from Dayton, by the *Short Line* Railroad. But, this operation, as we understand it, does not contemplate taking the tunnel at all. On the contrary, we understand the route is to be from Sharon to the track of the Marietta Railroad, by which it is to enter Cincinnati. If this should be the policy of the Central permanently, we think it a mistake. The Tunnel is, in our opinion, *per se*, a valuable enterprise. The main reasons are these:

1. It is well known, that all the Railroad entrances into the city are on the river bank, that is, on the lowest level; from this level none of them can ascend with the cars. There is not even a Street Railroad line, from the lower level to the upper. The consequence is, that all these roads are crowded, and embarrassed, and no effort to get space has ac-

complished it, or will. The *desideratum* of street roads is to get an *entrance on the upper level.* There then is nothing which can be substituted for such an entrance. Five-sixths of the population of Cincinnati is above the lower level, and five-sixth of the business will be.

2. For the Little Miami, the Marietta, the Sandusky, and even the Daytou Road, the entrance by the Tunnel will be far more direct and short, than what they have, or can get.

3. The Tunnel leads directly to a point in the city, which is altogether more central and convenient, than any other which can be found. The *Tunnel* will make its entrance on Sixth Street, from Broadway west, and if necessary, it can without difficulty be conducted to the Sixth Street Market Space, where there is abundance of room. This is the very centre of the city, and distribution from that point can be made with the greatest ease.

For these very obvious reasons, we think that whatever road takes the Tunnel and completes it, will make an *unquestionable speculation.*

## THE PACIFIC RAILROAD.

It is extremely unfortunate that to so important an enterprise as the Pacific Railroad should have happened a like misfortune to the man that "went down from Jerusalem to Jericho;" and although we have no *side* in the matter between the parties, we greatly fear that the progress of the work and the material interests of the country are to be seriously retarded and sacrificed, to satisfy the ambition and lust of the few who appear to be figuring in this affair. We give the following from the New York *Tribune*, as it embodies many official documents, and hope that Congress will, when it meets, see to it that the work is pushed forward with vigor, even if the work has to be taken out of the hands of all parties now in interest. We do not believe that the Government ought to break faith, but no matter who suffers, the country can not afford to have its vital interests trifled with. The only true policy of building this road is to do it under the direct surveillance of the Government, and that, too, by employing on it that portion of our armed force that are regarded by many as being at present a dangerous element in our midst, who ought to be re-enlisted for this purpose, with sufficient inducements offered to them as would induce them as a body to continue in the service of the Government. We refer to the employment of the black troops. There are very few of them who are not now getting much greater compensation than they ever received before, and very few of them, if returned to civil life, would ever receive as much again. But on this subject we have not room to say much in our present article.

[Correspondence of the New York Tribune.]

WASHINGTON, Aug. 17, 1865.

The readers of the *Tribune* may remember that Congress, by an act approved July 1, 1862, and an amendatory act approved July 2, 1864, provided for the construction of a railroad from the Missouri river to the navigable waters of the Pacific, by authorizing the incorporation of a Company to construct a line of road from Omaha City, in Nebraska Territory, to the western border of the State of Nevada; and by authorizing the Central Pacific Railroad Company of California to construct a road from the navigable waters of the western terminus of the Sacramento River to the above mentioned road; and the Pawnee Western Railroad Company to construct a branch road from Kansas City, to unite with the main trunk on the 100th meridian; and the Hannibal and St. Joseph and Pacific Railroad Company of Missouri to construct a branch road through Kansas, to connect with the Kansas branch, or with the main trunk; and also authorizing the Union Pacific Railroad Company, or other legally authorized Company, to be indicated by the President of the United States, to construct a road from Sioux City, in the State of Iowa, to unite with the main trunk line not further west than the 100th meridian—this main trunk railroad and branches to be so constructed as to form one continuous railroad of the same gauge from the navigable waters of the Pacific to the Missouri river, and there connecting with the main lines extending to the principal cities on the Atlantic coast.

The records of the Interior Department show that the work on this great enterprise has been progressing with commendable vigor during the last year at these points.

The Central Pacific Railroad Company reported as completed on the 31st day of August, 1864, a section of thirty-one miles, which report having been approved by the President, entitled them under the statute to receive from the Secretary of the Interior certificates for 396,800 acres of land, and also to receive from the Secretary of the Treasury United States bonds to the amount of $486,000.

Information has reached the Secretary of the Interior that twelve additional miles of said road have been completed and are ready for inspection. The Commissioners are directed to make the proper examinations and report, when, on its being approved by the President, the Company will be entitled to receive a corresponding additional amount of subsidy in lands and bonds.

The amount of subsidy allowed by Congress to these Companies for the least difficult parts of the construction is 12,800 acres of land, and $16,000 in United States bonds per mile; for three hundred miles of the *most* difficult, to wit, in the Rocky and Sierra Nevada Mountains, they are to receive three times that amount, and for the remainder only twice as much. The portion of the Central Pacific road already completed only calls for the smallest quota of subsidy.

The Union Pacific Railroad Company proper commenced work about one year since at a point indicated by the President of the United States, near Omaha City, in the Territory of Nebraska, the contractors obligating themselves to construct 100 miles of the road westward at the rate of $50.000 per mile. The work has been progressing satisfactorily, and it is hoped that that part of the road will be completed within the time indicated by Congress. Some delay, however, has been occasioned by an application of the Company to the President of the United States, for permission to change the location of about twenty miles of the line westward from Omaha City, so as to secure an easier grade, which proposed new location, if adopted, *would increase the distance on that section about nine miles.*

As this would increase the subsidy in bonds and lands in proportion to the increase of distance, and as the advantage of procuring an easier grade involving more shallow cuts and lighter work would enhance the profits derived by the contractors, possibly with comparative advantage to the public, the Secretary of the Interior advised that the proposed change of location should not be approved by the President without a thorough and careful examination by a competent engineer to be detailed by the Secretary of War for that purpose. In accordance with this recommendation, Lieut.-Col. Simpson, of the Engineer Corps of the Army, a gentleman of high reputation for integrity and ability, and much experience, was detailed, repaired to the ground, made a personal examination of both lines, and is now in this city making the necessary computations preparatory to a report.

This contract for the construction of the road at $50,000 per mile, has been the occasion of some comment. The Government directors, however, while they do not fully justify the action of the Company in making this contract, have given to the Secretary of the Interior this explanation: That the law required certain sections of this road to be completed within a given period. The Company were consequently compelled to commence the work at a time when gold was above 250, and when labor, and iron, and other materials were at a correspondingly high price. Reducing this $50,000, which was currency, to a coin standard, shows the actual cost to be less than $20,000 per mile, which cannot be considered an extravagant cost for a first-class railroad in that locality.

They also state that the stockholders advanced the means to the contractor, on private account, to enable him to proceed with the work—that all the stockholders were invited to participate in the advantages of this arrangement, if any should accrue, in proportion to the funds they were willing to advance—and that at the time this arrangement was made, they were unable to induce outside capitalists to advance the necessary means for the prosecution of the enterprise.

Work was commenced on the Kansas branch, leading from Kansas City to the 100th meridian, by the Pawnee Western Railroad Company, a company authorized by the Territorial laws of Kansas, now known as the Union Pacific Railroad Company, eastern division, under the auspices of Gen. Fremont. But difficulties arising between the personal friends of Gen. Fremont and those of Mr. Hallett, the stockholders became divided in their adhesion to these respective leaders, presenting the anomaly of two organizations, each claiming to be the legitimate representative of the company.

Hallett and his adherents, after the work had been some time in progress under the direction of the adherents of Gen. Fremont, succeeded, it is stated, in driving the laborers from the work, being aided by the military under an order emanating from Gen. Ewing, he being, it is said, a large stockholder himself, since which time the Hallett organization has had the control of the line.

A few days after the present Secretary of the Interior assumed the duties of his office, Mr. Usher, the late Secretary of the Interior, called on him for certified copies of certain papers, including the report of the Commissioners who had been previously appointed to examine the road, alleging that 40 miles of i

had been completed. Secretary Harlan informed him that the report of said Commissioners had been received that morning by mail, and that he had not been able to examine either it or the subject to which it related, but would do so at the earliest practicable moment. Mr. Usher informed the Secretary that a duplicate had been received by the President of the United States and referred to the Secretary of the Interior. On being told by Secretary Harlan that no such paper had been received by him on reference from the President, Mr. Usher remarked that it was in the Department, and that he desired certified copies of it and the papers named, that day, for the purpose of presenting them to the Secretary of the Treasury, to enable the Company to draw the Government bonds to which they would be entitled for the 40 miles of road said to be completed. In the course of an hour, copies of said papers, with an official certificate of authenticity, were presented to Secretary Harlan for his signature. Learning, on inquiry, that neither the Assistant Secretary nor the chief clerk had directed this work to be done, and not having seen the papers, nor given such orders in person, and on the clerk who did the work stating that he did it under the direction of Mr. Usher, Secretary Harlan at once dismissed the employee from the Department, informing him that he did not desire to continue in the Department any one who did not recognize him as its head.

This, we understand, was the foundation of Mr. Usher's feeling toward his successor in office, Secretary Harlan having informed him that when he wanted anything done in the Department he must apply to the Secretary, the Assistant Secretary, or the Chief Clerk, and must not presume upon his previous official connection with the Department for authority to direct its business.

The following is a correct copy of the report of the Commissioners.

*To His Excellency*, ANDREW JOHNSON, *President of the United States:*

The undersigned, appointed by your Excellency Commissioners to examine the railroad and telegraph line constructed by the Union Pacific Railroad Company, Eastern Division, respectfully beg leave to say that they have passed over said road and examined its construction and equipment, and now have the honor to report:

That said Union Pacific Railroad Company, E. D., have constructed a railroad beginning at a point on the line between the States of Missouri and Kansas, on the south side of the Kansas river, as near the mouth thereof as it is practicable for the Pacific Railroad of Missouri to connect therewith, and thence crossing to the north side of the Kansas river on a pile bridge, and up the valley of the said river, on the north side thereof, to a point opposite the city of Lawrence, in Kansas, a distance of 38.25 miles.

They have also built a railroad, beginning on the bank of the Missouri river, on the north side of the mouth of the Kansas river, in the city of Wyandotte, and running up the Kansas Valley, a distance of (1.77) one-and-seventy-seven-hundredths miles to a point where it intersects the road beginning on the south side of said river, making together (40.02) forty and two hundredths miles.

In the construction of said railroad, we are assured and have every reason to believe that all the rails, spikes and chairs used are of the best quality of American iron. The alignments and grades of said road are good, the shortest radius of curvature being 955 feet, and the maximum grade (50) fifty feet per mile. The bridges and culverts are of timber, as is usual in new Western Railroads, and are well and substantially built, and of good material.

The track is well laid and in good condition for a new road. It is supplied with all the water stations, side tracks, depots, locomotive engines, and passenger and freight cars necessary for its present business. The said company have also built a line of telegraph along its railroad from the town of Wyandotte to their station house opposite the city of Savannah. This telegraph line appears to be well and substantially built in the usual manner of Western lines.

The undersigned Commissioners further certify that they have stated above the true condition of the railroad and telegraph built by said railroad company, and further state that although the law of Congress relating thereto may not have been literally fulfilled in all respects, yet believe it to have been in all essential particulars, and therefore respectfully recommend its acceptance by your Excellency.

D. R. GARRISON, S. J. CRAWFORD,
H. C. MOORE, Commissioners.

After thoroughly examining the report of the Commissioners, the Secretary returned it to the President with the following statement:

DEPARTMENT OF THE INTERIOR,
Washington, D. C., May 26, 1865.

SIR: I have the honor to return the report of Daniel R. Garrison, Henry A. Moore, and Samuel Crawford, in relation to the railroad and telegraph line constructed by the "Union Pacific Railroad Company, Eastern Division," which was referred by you to this Department, and received yesterday.

It appears from the papers on file in this Department, that said Garrison and Moore and Richard W. Thompson were, by the President of the United States, pursuant to the authority vested in him by the sixth section of "an act to amend an act entitled 'an act to aid in the construction of a railroad and telegraph line from the Missouri river to the Pacific ocean, and to secure to the Government the use of the same for postal, military and other purposes,'" approved July 2, 1864, appointed, on the 29th ultimo, Commissinners to examine the road or roads authorized by said acts to be constructed by the "Union Pacific Railroad Company, Eastern Division," and make a report in relation thereto, as contemplated and specified by said acts.

Samuel J. Crawford was, on the 5th inst., appointed such Commissioner, vice Richard W. Thompson, declined.

The proviso to the fourth section of the original act, prescribes the condition on which the President shall exercise the authority vested in him by the enacting clause. A verified statement of the President of the Company, showing that 40 consecutive miles of said road and telegraph have been completed in the manner required by said act, and setting forth with certainty the points where such 40 miles began, and where the same end.

John D. Perry, Esq., President of the Company, filed such statement, accompanied by the report of the Chief Engineer.

When it shall appear to the President that 40 consecutive miles of such Road and Telegraph line have been completed and equipped in the manner required, then, upon the report of the Commissioners to that effect, patents shall issue, conveying to the Company title to lands, as provided for in said act.

It must appear to you that the Company has complied with the provisions of the act touching the construction and equipment of the Road and Telegraph, in order to entitle them to the benefits of the act. You are the ultimate authority by which the question of such compliance must be determined.

I respectfully invite your attention to the fourth section of the original act, (Stats. at Large, vol. 12, p. 492,) and sixth section of the amendatory act (Acts 1st session, 38th Congress, p. 359). They contain all the legislative provisions bearing upon the questions raised by the report.

I am, sir, with much respect,
Your obedient servant,
JAS HARLAN,
Secretary of the Interior.

To the President.

Three days later the Secretary of the Interior addressed the following letter to the President.

DEPARTMENT OF THE INTERIOR,
May 29, 1865.

*To the President*:—After carefully considering the report of the Commissioners appointed by the President to examine the first section of forty miles of the "Union Pacific Railroad, Eastern Division," referred to this Department by the President in connection with other facts which have come to my knowledge, I can not recommend its approval, as I am not satisfied that said section has been completed and equipped in all respects, as a first class railroad as provided by law.

The Commissioners have not reported to the President the eesential facts necessary to enable him to form a correct opinion of the character of the road, or to understand the conclusiveness of the opinion of the Commissioners; such as the weight of rails, character and number of curves, character of grades, and whether they could be avoided or reduced by reasonable labor and expenditure, number and character of stations, depots for freight and passengers, the number and character of engines, and freight and passenger cars, &c.

I therefore respectfully recommend that the President direct an examination of said section of said road by a new Board of Commissioners to consist of a competent engineer, to be detailed by the Secretary of War, the Governor of Kansas, and the Hon. H D. Scott, of Terre Haute, Indiana. Very respectfully,
Your obedient servant,
JAMES HARLAN, *Secretary.*

The President, after carefully examining the law and the report, decided as the Secretary suggested that the Report of the Commissioners was defective and unsatisfactory, not setting forth the facts necessary to enable him to form a correct opinion of the character of the road, and he therefore indorsed upon the Secretary's letter last above recited as follows, to wit:

"Let the appointments recommended within be made. "ANDREW JOHNSON."

This decision being communicated by the Secretary to the Vice-President and acting President of the road, Mr. Perry, application was made to President Johnson for leave to furnish testimony in Washington to supply the deficiency of the report, and thus avoid the delay consequent upon a re-examination of the road.

The President sending for the Secretary and informing him of the wishes of the company, on his suggestion suspended the order appointing a new board, to enable the company to present the testimony to which they referred. On receiving this testimony it was submitted, with the Report of the Commissioners, to Gen. McCallum, Superintendent of Military Railroads, who made the following report:

WAR DEPARTMENT, OFFICE OF MILITARY DIRECTOR AND SUP'T OF RAILROADS, U. S., WASHINGTON, June 19, 1865.

*To his Excellency the President:*

In obedience to your command of this date, directing me to report to you my views upon the propriety of the Government accepting that portion of the Pacific Railway, now presented by the Company, I beg leave to submit the following:

I have carefully read and considered the report of the Commissiouers, Messrs. Garrison, Moore and Crawford; the affidavit of the Chief Engineer, and the verified statement of the Allentown Rolling Mill Company, together with the communication of the Honorable Secretary of the Interior of the 29th ultimo, making exceptions to the report of the Commissioners, and after careful consideration of the same, I am of the opinion that the additional proof submitted under the order of your Excellency, of the 5th inst., relieves the case of the objections taken by the Honorable Secretary; and that the report of the Commissioners, in connection with the additional proof found in the files submitted for my consideration, shows that the acts of Congress governing the construction of the portion of said railway now under examination, have been fairly complied with by the Company, and that your Excellency may, with propriety and justice, accept the same.

I have the honor to return the papers submitted, and, am your Excellency's obedient servant, D. C. McCALLUM.

Brevet Brigadier-General, Director and General Manager of Military Railroads, U. S.

The President on receiving the report of Gen. McCallum, indorsed upon the report of the Commissioners the following:

EXECUTIVE OFFICE, June 19, 1865.

Upon examination of the accompanying report of Brevet Brigadier-General D. C. McCallum, the recommendation of the Commissioners is approved.

ANDREW JOHNSON,
*President of the United States.*

On receipt of the papers in the case from the President, the Secretary of the Interior caused certified copies to be sent to the Secretary of the Treasury. Soon after this the rival organization, who had, as previously stated, been forcibly ousted, as they alleged, from the control of the road, filed papers with the Secretary of the Interior and the Secretary of the Treasury, alleging, among other things, the forcible entry and detainer; and that Mr. Usher, while Secretary of the Interior, persistently refused to permit them to file in the Department any evidence of their alleged rights and of the illegal and wrongful conduct of the rival organization represeuted by Mr. Usher and Mr. Perry; and claiming that they held, under the laws of Kansas, a mechanic's lien on the whole road, equipmeut and franchises, that must not he lost sight of by the Secretary of the Interior and Secretary of the Treasury in issuing bonds and certifying lands, as provided by Congress, in aid of the construction of said road. All the papers in the case filed with the Secretary of the Treasury were referred hy him to the Solicitor of that Department for examination and a report.

The reason stated hy Mr. Usher for pressing the Secretary of the Interior to an immediate decision without careful personal examination was the necessity of the Company receiving the Government bonds to enable them to construct the next succeeding section of the road. But, upon becoming advised of the purposes and probahle rights of the rival organization, he has notified the Secretary of the Treasury that they do not desire a decision until after a full investigation of the merits of the controversy.

From this narrative it is manifest that the Secretary of the Interior has resolved that so far as it depends upon him the snbsidy authorized by the statutes shall not he turned over to any of these parties until it shall appear from satisfactory and impartial evidence that the road or sections thereof have been completed, and are in fact first class railroads, as required by law, and that the representatives of interested parties, however high they are now, or may have been, in official or social position, will not divert him a hair's breadth from this purpose. Of the new evidence presented by the Company and passed upon by Gen. McCallum, it may he observed that it consisted entirely of the sworn statement of Engineer Keeler, who was at the time the employee and servant of the Company, and the affidavit of the contractor who furnished the iron, and hence could not be considered as entirely disinterested and impartial.

To guard against uncertainty and ambiguity in the future, the Secretary has issued the following instructions to the Commissioners appointed to examine the new section of the Central Pacific Railroad, and they will be sent to the Commissioners on each of the other lines now in course of construction, and will control in any fnture examination on those roads. Faithful details, under the oath of disinterested examiners, so ample as hereby required will always enable the officers of the Government herc to have a judgment as to the character of the road:

DEPARTMENT OF THE INTERIOR,
Washington, D. C., July 25, 1865.

GENTLEMEN:—The Surveyor-General of the State of California has transmitted to the President of the United States a certified copy of the verified statement of Leland Hanford, Esq., President of the Central Pacific Railroad Company of California, in relation to the construction of twelve consecutive miles of railroad, commencing at the termination of the 31 miles of railroad and telegraph liue described in the statement made by said Company, August 31, 1864, and ending at the place or town known as "Clipper Gap," in the County of Placer, in said State.

The original statement was filed in the office of the Surveyor-General, pursuant to the provisions of the act entitled "An act to aid in the construction of a railroad and telegraph line from the Missouri River to the Pacific Ocean, and to secure to the Government the use of the same for postal, military, and other purposes, approved July 1, 1862, and the act amendatory thereof, July 2, 1864." I presume, for I have no informatiou on the snbject, that you have heen notified of the filing of the statement, in order that you may proceed without delay to examine that part of the railroad and telegraph line to which it relates, and report thereon to the President of the United States.

The President must depend on the information embodied in your report to enable him to discharge the duty of determining whether the Company has complied with the conditions and requirements of the acts of Congress touching the completion and equipment of this particular portion of the road. He therefore instructs me to say to you that he desires that your report should contain,—

*First.* A statement of the number of degrees of curved and the length of straight lines, the width of embankments and excavations at the grade line, and the rate of the inclination of the slopes.

*Second.* A description of the culverts, their number and size; whether built of stone, brick or wood; the number and span of open box and arch.

*Third.* A description of bridges, whether of iron, stone or wood; the plan on which they are built; their number and maximum span; the abutments and piers of each, whether temporary or permanent, and if of stone, brick or wood; also, the length, hight and spans of trestle work, and whether built on curved or straight line.

*Fourth.* A statement of the number of cattle-guards and road-crossings; the number of rods of post and board and rail fence, and the number of farm gates.

*Fifth.* A description of the superstructure, containining the number of miles of main track; the number of miles of side track; the weight of the rails per linear yard; the number of chairs to the mile; the weight of each and whether of cast or wrought iron; the nnmber and weight of spikes to the mile; the number of ties to the mile, their length, breadth and thickness, and the kind of timber composing them; the number of miles of main and side track ballasted; the number of cubic yards of ballast to the yard forward, and the kind of material used for hallast.

*Sixth.* A description of the stations, with the number of passenger and freight houses, machine shops, wood-sheds and water tanks, the material of which they are built; the number of engine-houses, the number of stalls in each and the material of which they are built; and a description of the signals, whether plain or "semaphore."

*Seventh.* A description of the rolling stock, setting forth the number of locomotives, the weight, cost and quality of each, and the name of the works where manufactured; the number of passenger, express, freight, platform, gravel, repair and hand cars, the cost of each, &c.

*Eighth.* A statement of the nnmber of miles that passenger trains can he run over the said extension with safety.

*Ninth.* Any other facts that may aid him in forming a correct opinion of the character of the road said to he completed.

You will also transmit with your report a map of this part of the road on a scale of twenty (Gunther's) chains to an inch, which shall show the radii and lengths of the curves, the directions and lengths of the tangents, and the width of land included between its boundaries; aud a profile of the line on a scale of 500 feet to an inch horizontal, and 25 feet to the inch vertical, showing the ascent or descent of each grade per mile.

I am sirs, very respectfully, your obedient servant,

JAMES HARLAN, *Secretary.*

To F. F. Low, P. H. Sibley, Josiah Johnson, Esqs., San Francisco, California.

## REDEMPTION OF NATIONAL BANK NOTES.

The following question is important and interesting; hut it suggests another; whether it is not better to keep in circulation the United States Notes now at par everywhere. It will always he difficult, if not impossible to keep the Notes of Banks, redeemable at all places, or, at any place,—except their own counters.

This subject has been considerably discussed recently, and with some degree of feeling sometimes. This is unnecessary, as it is one of those financial questions which are likely to be decided ultimately by the calm considerations of reason. To arrive at these results, all sides of the question are to be examined. Whether a paper circulation issued at local points can be maintained at par all over the country, is a matter now to be settled for the first time. If it is successfully done, it will be a great advantage to those issuing and using such circulation. Among the opinions of those who think it to be impracticable, we select the following remarks from the *Journal of Commerce*, as giving the ablest view of that side of the question:

The present law allows certain institutions located in various places all over the country to issue bank notes based on Government stocks, for general circulation. It requires the issuers to redeem these promises, not in coin, but in certain notes popularly called "greenbacks." A certain definite value was given to these issues beyond that of a mere promise, inasmuch as the law made them a legal tender for all dues to the Government except customs, and to all National banks for any debt whatever. If only so many were issued as were needed at each point of issue for these especial payments, and their function was then fulfilled, they would all be alike in their market value, since one would answer for the purpose named just as well as another. But the moment they come to be in excess at any point, the holder desires to exchange them for the greenbacks, the latter having still more extensive privileges. Here the difference begins. If one is issued at Leavenworth, in Kansas, and only exchangeable there, it can not be worth as much to the holder here as if it had been issued in this city and was exchangeable on the next block To ask the Leavenworth Bank to provide a redeeming agency at this financial center, in order to make his notes equal here to that of the First National Bank of New York, is not to "throw doubts on the National credit" or to intimate that the Leavenworth Bank is a swindle. If the Kansas Bank were transferred to New York, and the City Bank removed to Kansas, the position would be reversed without reference to their individual character. It is the distance and not the security which is chiefly taken into account. It is not that the New York holder doubts the Kansas promise, but he wants the thing promised, and the cost of obtaining it is so much discount on the notes of the distant bank.

It is said that the holders here of distant bank notes may pay them all to the Treasury or into the National banks, and thus dispose of them without caring to have them exchanged. We may then ask what those receptacles are to do with them? The Treasury may pay them out, and the people under the law must take them from Government officials for any debt whatever, except interest on the public securities. But the banks have no such privilege. If called on they must pay their debts in greenbacks. If they may not ask other banks to aid them, each by redeeming its own issues, then the new paper money is virtually inconvertible. Let this once be established, and the National Bank notes can no more be kept at par with greenbacks, in which they should be payable, than the greenbacks can be with gold, which is the substance of their promise.

A bank note kept at par with its standard, whether it be gold or greenbacks, at the great centers of finance, will be at par throughout the whole country, and thus such issues will be as near a uniform currency as can be made out of a paper representative of coin. Any attempt to enforce such uniformity by forbidding the people to seek a par redemption, will be as signal a failure as the disastrous attempt to make inconvertible treasury notes equal to gold by an Act of Congress. The National banks promise to redeem their issues in greenbacks; if they only fulfill this promise at their own counters, it will not be long before the more distant will be at a discount at the financial center. Suppose that all here should agree not to send home any distant notes, but to take them and pay them out at par, this course would soon drive out of circulation every bill issued near at home and available for redemption. The latter would be sent in again the moment they appeared. If all banks paid specie at their own counters, and all bank notes were by agreement kept at par here, no matter where they were issued, it would soon follow that those banks within reaching distance would have to retire all their circulation, leaving the field entirely to the distant or inaccessible.

So important was a par redemption deemed to be, even by those who devised the National Bank system, and who can not be accused of being too conservative in their financial principles, that they provided for this very thing. Section 32 enacts "that each association, organized in any of the cities named in the foregoing section, select, subject to the approval of the Comptroller of the Currency, an association at the city of New York, at which it will redeem its circulating notes at par." Various other provisions were made, all looking to a par redemption at some financial center. And yet we are now told that any one who proposes to insist on a par redemption through a central agency is an enemy to the National credit, and is seeking to embarrass the Government.

The soundest and best conducted of the National banks desire a redemption system, and foresee the effect of an opposite course; but whether they will be able to carry it out, it is yet difficult to determine.

## RAILROAD DECISIONS.

LIABILITY OF EMPLOYERS TO THEIR SERVANTS FOR THE NEGLIGENCE OF FELLOW SERVANTS.

Many decisions have been rendered upon the various questions in relation to the responsibility of masters for injuries occurring to their servants in the course of their employment, but the importance of the subject is so great that a new case in point, when thought worthy of litigation and a formal judgment, is always deserving of notice.

Such is the recent case of Waller, admx., ag't. the South Eastern Railway Company of England.

The deceased, G. Waller, was a railway guard in the employment of the defendants at weekly wages, and it was his duty as such guard, to travel with and in the passenger trains worked by the defendants on the North Kent-Railway, a line belonging to and worked by the defendants under the power of the act of Parliament relating to the South Eastern Railway Company.

In the course of such duty while he was traveling in a passenger train of the defendants carrying passengers for hire on the above line, between Stroud and Gravesend, on the 20th of March last, the train ran off the line and overturned the break van in which he was, whereby the said G. Waller was killed.

It was admitted by the parties that the accident happened through the decayed condition of the trenails which fastened the chairs to the sleepers on the defendant's railway, and that it was the duty of the "gauger" of the platelayer, a servant of the defendant, to see to and keep in proper repair and condition, the permanent way by renewing such trenails as were decayed; that the "gauger" was a person of competent skill and that through his neglect of duty the road became unsafe.

It was further admitted that G. Waller was killed by the train running off the line, through the decayed condition of the trenails; that none of the directors, or officers, or servants of the company knew of such defects; but the above mentioned gauger ought to have known it, and it was negligence in him not to know it.

*Pollock, C. B.*, now said, I am of opinion that the verdict ought to be entered for the defendants. The question, in substance, is whether an action can be maintained by a servant of a railway company for injuries occasioned by the negligence of another servant of the company. The plaintiff is the widow of a guard who, whilst in the employment of the defendants, was killed by a train running off the line, in consequence of the negligence of a servant of the company, whose duty it was to take care that the plates of the railway were so fixed as to be perfectly safe and secure.

I think it unnecessary to review the authorities.

The question resolves itself into this: whether the servant, whose negligence caused the accident and the servant who was killed, were at the time engaged in what may be called one common object. I think that the superintending the trains on their journey, and the taking care that the rails, on which the carriage runs, are firmly and securely fastened and bolted—constitute one common object, viz: that the passengers shall be conveyed in carriages which are safe and rails which are free from danger. Where, indeed, two trains belonging to the same company are traveling on different lines of rail, which at a certain point intersect each other, or join a principal line, and in consequence of the negligence of the driver of one of the trains a collision ensues, by which the driver of the other train is injured, I own there seems to me less of what may be called an employment in one common object. No doubt the common object of the two servants is the driving their respective trains to their place of destination; but each of them has in particular a different object, one of them has one train under his control, the other another train. But in this case the common object of both servants was safe conveyance of the passengers in that particular train, it being the duty of the one to superintend the carriages, of the other to take care that the rails were in such a condition that the journey might be safely performed. Viewing the case with reference to observations of Lord Cramworth, in Bartonshill Coal Company *vs.* Reid, (3 Macq. 284,) that "when a workman contracts to do work of any particular sort, he knows, or ought to know, to what risk he is exposing himself." There can be no doubt that the guard of a railway train must anticipate, among other probable sources of danger on the journey, the neglect of a servant to oil the wheels of the carriages, the neglect of another to adjust the points, the

neglect of another to take care that the rails are safely and securely fastened and bolted I think that this case falls within the principle laid down for the first time in Priestly *vs.* Fowler, (3 M. & W. 1,) which is not, in my opinion, opposed to any authority which has arisen out of it.

*Martin B.*—I believe that it was in consequence of a doubt entertained by me that judgment was not given at the conclusion of the argument. I certainly did think it, as a matter worthy of consideration, and I think so still whether this case falls within the rule laid down by Lord Chelmsford, C., in the case of the Bartonshill Coal Company *vs* McGuire, (3 Macq., 307,) that "where servants are engaged in different departments of duty, an injury committed by one servant upon the other by carelessness or negligence in the course of his peculiar work, is not within the exception, and the master's liability attaches in that case in the same manner as if the servant stood in no such relation to him." Were I satisfied that Lord Chelmsford, when he speaks of servants engaged in different departments of duty, contemplated an engine driver or guard of a railway train as being a different service from that of a platelayer or other persons employed to take care of the line. I should be less willing to concur in this judgment; but I have carefully read the case of the Bartonshill Coal Company *vs.* Reid, and the Bartonshill Coal Company *vs.* McGuire, and also the judgment of the Supreme Court of Massachusetts in the case of Farrell *vs.* Boston and Worcester railway (4 Metcalf, 49,) whose observations are applicable in this case. Chief Justice Shaw commences his judgment thus: "This is an action of new impression in our courts, and involves a principle of great importance. It presents a case where two persons are in the service and employment of one company, whose business it is to construct and maintain a railroad, and to employ their trains of cars to carry persons and merchandise for hire. They are appointed and employed by the same company to perform separate duties and services, all tending to the accomplishment of one and the same purpose, that of the safe and rapid transmission of the trains; and they are paid for their respective services according to the nature of their respective duties and the labor and skill required for their proper performance. The question is whether for damage sustained by one of the persons so employed, by means of the carelessness and negligence of another, the party injured has a remedy against the common employer." The Chief Justice then proceeded to discuss the subject with great ability, and the result is that he comes to the conclusion that the railway company are not liable. I yield to that opinion, and concur in the other members of the court.

*Bramwell B.*—I am also of opinion that the verdict ought to be entered for the defendants for the reasons already so fully stated by the Lord Chief Baron and my brother Martin. I think the case falls within the principle laid down in Priestly *vs* Fowler, and the subsequent authorities which have been cited. It is certainly governed by the criterion suggested by Lord Chelmsford, in the Bartonshill Coal Company *vs.* McGuire, and by Chief Justice Shaw in the judgment referred to by my brother Martin, and it is also within the criterion given by the Lord Chief Baron, which I consider a very good one, viz: were the servants at the time of the accident, engaged in one common object.

Judgment for defendant.

## THE COLORADO RIVER.

Considerable interest has been awakened relative to the navigation of the Colorado river. It has been demonstrated that the stream is navigable into Utah Territory, and that freight can be transported over that route cheaper than any other. The Colorado Steam Navigation Company has three steamers on the river, besides which there are some others.

It is stated by a correspondent of the *California Farmer* that the river is navigable with steamers at all seasons, for 600 miles from its mouth and to within 380 miles of Salt Lake City. This has been practically demonstrated by Captain Truworthy, of the New Uninn Line; the steamer Esmeralda and schooner Victoria, belunging to the company, being the pioneer vessels in this enterprise. The writer says:

"The general course of the Colorado for 600 miles is north and south. For the first 125 miles there is excellent land and timber from five to twenty-five miles in breadth. The soil is very rich, and is capable of raising all kinds of grain. Above this section along the river, at intervals of from ten to thirty miles, are beautiful valleys, extending for miles along the banks of the stream, the green grass and timber of which produce an impressive effect upon the spectator as he suddenly emerges from the deep cañons which separate them, in some of which the perpendicular rocks stand up 1000 feet high. At each change of position new and startling beauties are revealed, the grandeur of which is so different from that of other rivers, that the mind can scarcely realize that what is seen is reality. All the richest colors of the rainbow can here be found, extending far over the highest summits of the loftiest peaks, or confined within the compass of a few hundred yards. To these favored localities the admirer of nature can come with the fullest assurance that he can, in these solitudes, look upon scenery which, in grandeur and magnificence, are unequaled upon the American continent.

In the vicinity of the present head of navigation is an excellent farming section. From here to Salt Lake City there is a good wagon-road. This road passes through forty-two cities and towns, containing a population of 60,000. These houses are built of stone, adobes and brick, and present a splendid appearance. The water being carried to the settlements from the adjoining mountains, and conducted down each side of the well-laid out streets, it is impossible for the country to suffer from drouth. The consequence of this is they have a regularity of good crops, and are enabled to meet the great demand from the surrounding mining country. These settlements have been established within a few years, for the direct purpose of producing cotton, in which they have been very successful.

Much grain and fruit is also raised here. By the opening up of the Colorado river, a complete change has been produced upon the country, and that portion that was heretofore considered to be upon the frontier is now the centre, where a large population have been and are still wending their way. Goods can be delivered there by the Colorado river at one-sixth the price charged for bringing them by the old route from the Missouri river. The trade of Utah, Montana, and a portion of Nevada and Idaho, must be diverted to the Colorado, where it can be done at less than one-half the rates of that of any other route, and the road has the additional advantage of being traveled at all seasons of the year. Within the last few months over $250,000 would have been expended in this city by merchants from these localities who came here to purchase, but owing to the suicidal action of the Legislature of California in reference to the legal currency of the United States, they were reluctantly compelled to go to New York.

The saving of the Utah Territory alone by this route will amount to over three millions yearly, not taking into consideration the great benefit to be derived by the general Government in the transportation of supplies to the interior. We are waranted in saying this trade of 230,000 persons must soon be done by the Colorado river. Is it not, then, of the utmost importance to San Francisco to secure the benefit of this growing trade? If prompt action is not taken, it will pass from their hands forever. A line of steamers once established from Panama, San Francisco can expect nothing, and her present trade will feel a great diminution.

## FIRES IN THE OIL REGIONS.

A brief telegram, which may have escaped the notice of many readers, was published the other day, to the effect that one of the oil-wells on Pithole Creek, Venango county, had taken fire and burned several persons—three quite severely. The well, it was added, continued to burn, in spie of all attempts to extinguish the flames.

Persons who have not spent some time in the oil regions can scarcely form an idea of the frightful effects of such a conflagration in localities where producing wells are numerous. The ground is apt to be forested with derricks, shanties, tanks, &c., all saturated with petroleum, and only awaiting the falling of a spark or the scratch of a match, to blaze up with fury. Added to this, many parts of the surface are creamy with the all-pervading liquid, which settles on a thousand little pools of water, or trickles lazily toward the nearest creek. Here are abundant materials to begin with; but these are not the most dangerous. Every *new* well opened, and a great majority of the old ones in operation, emit large quantities of gas, which comes up in puffs and coughs, or in an unbroken current through the tube, its escape being visible to to the eyes and ears, as well as to the nostrils. This gas is of the variety known as carbonetted hydrogen, being inflamable, and differing slightly from that used in illuminating our cities. The distillation of this gas, instead of carbonate acid, in the bowels of the earth, with such an abundance of water alongside, or rather mixed with it, is one of the secrets, which have not yet been revealed, as far as we are aware. Whatever the cause, it arises from single wells in quantities sufficient to supply fuel to the engines driving the pumps —nay, in some instances, to two, three or four of these.

Now, suppose that, at the moment when oil is struck, when there is apt to be a rush of gas and petroleum to the surface, a single spark from the engine, or a tobacco-pipe, comes in contact with this ascending column, what can the consequence be but a conflagration. In a single second the blaze may leap upward fifty feet, seizing upon derrick, engine-house, and every other inflammable object in the neighborhood. If the day be windy, and plenty of other works are standing close by, the probability is that hardly one will escape.

A spark falls into one of these huge oil-tanks, in an instant it takes fire and blazes up, bursting its sides and spilling out its contents on the earth, which soon becomes one sheet of flame. This is not all; for as it enters the creek it literally "sets the creek on fire," communicating destruction to the boats laden with petroleum, which, in an instant catching the contagion, have their lines burned and float down stream to carry this agent of destruction perhaps for miles. This is no fancy sketch. Two or three years ago, one of those conflagrations broks out on Oil Creek, the boats continuing to burn, until they reached the Alleghany Bridge at Franklin, *ten miles* from the place where the fire broke out. Of course, the bridges being wooden structures, perished.

On another occasion one of those fires, near the village of Rouseville, could not be extinguished until twenty-five persons, including the proprietor of the well, had lost their lives.

There is no danger of this devastator extending down to the oil springs from 300 to 600 feet underground, inasmuch as it has to be constantly fed by oxygen gas from above ground. Whether the flame reaches beneath the surface at all is very questionabl. A more important consideration is *how to extinguish it.* This is sometimes done by directing into the orifice a column of steam from an engine to the leeward; sometimes by pushing forward a quantity of earth into the pit, when this can be done with safety; but often the mischief goes on for days, until the gas has measurably spent itself, and laborers feel safe in approaching this mouth of the infernal regions.

After all, the losses of property described above are simply *superficial*, not extending to the petroleum springs, which are as safe as if separated from the fire by the Atlantic ocean. This is, therefore, no reason why a good paying stock should be sacrificed, as was the case the other day, on receipt of the news, simply because the upper works have been destroyed by either flood or flame.—*N. Y. Times.*

☞A paragraph, says the N. Y. *Herald*, has been extensively published, stating that the United States Circuit Court, in its recent decision of a preliminary motion in the case of Wadsworth versus the Chicago and Northwestern Railroad Company, decided that the consolidation should not be interfered with. The fact differs from the statement. The Court distinctly refused to decide any point connected with the consolidation. They merely made an order requiring the defendants to give bonds to await the ultimate decision of the case, instead of taking the road out of their hands and appointing a receiver for the property. The decision was brief, and was given in the following words:

We do not feel disposed to decide the merits of this controversy on the present motion. The magnitude of the interests involved makes it proper not to give a decision until the losing party can, if so advised, take the case to the Supreme Court. The motion for an injunction and the appointment of a receiver has been argued with eminent ability and great diligence. We can see no necessity now for interfering with the management of the road. If the defendant will give bond, with sufficient surety, to abide the ultimate judgment of the court, a receiver will not be appointed. In the most favorable view of the controversy for the defendant, it can not avoid paying to the non-consent stockholders of the Galena road, the value of the Galena stock, on the 1st of June, 1864, with interest. The defendant or one of its directors is, therefore, required, in ninety days, to execute a bond in the penalty of one hundred thousand dollars, payable to the clerk of this court, for the benefit of the parties in interest, with surety or securities, which bond shall be conditioned to abide the final order of the court, and shall be approved by one of the judges of this court. If other non-content stockholders make themselves parties to the suit, before the hearing, the penalty of the bond can be increased if deemed necessary, or an additional bond can be given.

The European and North American Railway Company.—The annual meeting of the European and North American Railway Company was held at Bangor on the 18th inst.

The stockholders authorized the directors to unite with or enter into contract with the Maine Central Railroad in a union of the two lines or for the running of the line by the Central Road. The contract with the New Brunswick Company was ratified and adopted with authority to make one interest from Bangor to St. John The act of the Legislature of Massachusetts in aid of the construction of the European and North American Railway was accepted, and an issue of $1,000,000 in bonds authorized, secured on the line from Bangor to the boundary of Maine, subject only to the lien of the city of Bangor on the road to Lincoln, with the lands and timber granted from the State of Maine as collateral security in the hands of trustees. The directors were authorized to issue $2,300,000 bonds, secured on the entire line and its branches, with the claims of Maine and Massachusetts against the United States assigned to the company as collateral security therefor in the hands of trustees. The president was authorized to enter into contracts for building the entire line from Bangor to St. John.

Arrangements are now made for commencing the work on the subscription of $500,000 of additional stock, and the completion of the entire line within four years from Bangor to St John.

The choice of directors was postponed to an adjourned meeting to be held on the 23d of August. Meanwhile the old board will take measures to raise subscriptions to the stock, and the election will be made by the existing stockholders.—*Bangor Whig.*

Ohio.—The new well on the east branch of Buck's Run, near McConnellsville, Morgan County, is doing finely. At 94 feet deep, it pumped by hand, in ten hours, 26 barrels of pure oil. Nearly 100 barrels of oil already taken from the well. A well in Middleport, Meigs County, is said to be yielding at the rate of 10 barrels per day. The Marietta *Register* is informed that Mr. F. A. Wilder, agent of the Boston Petroleum Oil Company, commenced setting up one of Frank's stationary engines on Eight Mile Run, June 19th. He began to drill July 1st, and struck oil on the 7th inst., at fifty-six feet. Five barrels per day. We have the most favorable accounts from the Mecca district. The Westmoreland Company opened a new well last Thursday that run 10 barrels of oil the first 12 hours. The well was drilled by hand in five days, is forty-one feet deep, and only cost about one hundred dollars to sink it. This favorable strike has renewed the excitement in Mecca.—*Oil News.*

## MONETARY AND COMMERCIAL.

The demand for money during the past week has been fair, but there has also been a good supply of currency; acceptable paper is always taken by bankers at reasonable rates, ranging from six to ten per cent. The excitement, consequent upon the New York and other bank frauds, developed during the past four weeks, has occupied much attention on the part of bankers and business men, and ought to have a salutary effect in inducing a closer scrutiny into their own affairs, as well as the affairs of their correspondents. Some of the scenes of the great Ketchum transaction partake of the low comedy style, and mingles the ridiculous with the sublime. "My son, you have ruined me, but I forgive you," may do between the Father and Son, but the wide spread ruin brought on others deserves a punishment a little more severe, and it seems high time that a few examples should be made. If a poor miserable wretch steals a five cent loaf of bread to save his starving children from death, he is sure to be severely dealt with, while the accomplished villian, who steals his millions, is almost made a pet of, and the general opinion seems to be entertained that "nothing will be done to him." This morbid condition of public morals relative to criminal subjects, can only be explained on the hypothesis of the Pennsylvania Dutchman who lost the tail-board out of his sand cart going up hill, so that by the time he reached the top of the hill he lost his entire load. "There was no use in swearing, the occasion was too great, he could not do justice to the subject." There is no punishment known to man, or practiced by civilzed nations, that would be sufficient for such criminals as Booth or Wertz, or even the half-way deified Jeff. Davis. Boston Corbett deserves the thanks of the entire nation for saving us the humiliation of a public trial and execution, and it would have been a happy thing for the country if Davis could have been sent hence while endeavoring to escape in petticoats. But what is to be done with the Ketchums? Oh! nothing. The injury done to an hundred families and the positive suffering brought on many of them, how are they to be atoned for? and how is the warning to be made to others who would like to imitate his vicious example? Can we "do justice to the subject?" if so, let it be done, and that right speedily.

Gold seems to have got to an average rate of 143@144, and these to remain without material variation. The great frauds and failures took it down to 2@3 per cent.; but in a week it got up to the old standard. It seems to have a slight tendency upward, and will have if we send Europe *a million a day in gold*, as we did last week. This is the same old story; foreign goods brought in for American gold to go out. As long as these

great disturbances go on in the current of international trade, we shall have the same fluctuations in the gold market; and if we resume specie payments we shall have still worse changes in the commercial markets. We don' know whether this can he altogether avoided; hut we think the importations of foreign fabrics should he reduced to the point at which we can pay for them with our own products and fabrics. This is fair; and it is the only safe mode of trading with other countries.

There has been an active demand for exchaoge, and the market has ruled close, so that currency has had to he shipped east to keep up the halances. The quotations are:

| | Buying. | Selling. |
|---|---|---|
| New York | 50@75 prem. | 1-10 prem. |
| Philadelphia | 50@75 prem. | 1-10 prem. |
| Boston | 50@75 prem. | 1-10 prem. |
| Baltimore | 1-10 dis. | par. |
| Gold | 143½ | 144¼@144½ |
| Silver | 130@133 | 133@135 |

The *Tribune*, of Monday, says of the New York market that "money remains easy at 4@6 per cent., with a majority of the transactions at 5 per cent., at which rates brokers have large amounts offered. The amount of unemployed funds continues large.

"Government honds were dull aud steady, without any transactions of moment with the exception of 7 30s., which are in active investment demand from saving hanks.

"In miscellaneous shares there was nothing doing. Atlantic Mail stocks sold at 140, a decline of 10 per cent. since yesterday, and closed at 141 hid.

"The railway share list opened strong on the street, Erie selling at 87¾, Michigan Southern, 64½, the halance of the list sympathized and was very strong. At the hoard prices generally were firm. Michigan Southern, Reading and Rock Island were the most sought for, and closed very strong. After the call the market reacted, and a decliue of ½@1 per cent. was made on the entire list. In the street the market was freely hammered, and a small decline took place. Eric sold at 86½, bnt rallied to 87, and closed steady. The general market is firm, and hut small amounts of stock are offering.

The closing quotations were: New York Central, 92; Erie, 87; Hudson, 109½; Reading, 105½; Michigan Southern, 64⅝; Clevcland and Pittsbnrg, 70¼; Rock Island, 108; North Western Preferred. 62½; Fort Wayne, 96½; Cnmberland, 41¾; Quicksilver, 55. The market closes firm at quotations."

IMPORTANT DECISION.—It has been the practice with many banking institutions to disconnt paper for their customers, upon condition that a portion of the proceeds shall remain on deposit; in other words, that those who keep the best accounts, or larger deposits, are entitled to the largest favors from a hank. But this should never form a contract or agreement hetwcen the horrower and lender. The *Bankers' Magazine* states that in the Court of Appeals of the State of New York, in the recent case of The East River Bank, Respondents, *vs.* Anson P. Hoyt and others, Appellants, it was decided that an arrangement, hy which one seeking a discount at a hank is required to ohtain a discount of paper amounting to $1500, to secure the application to his use of $1000 of the proceeds, without the right to use the remainder thereof, except in payment of the payment discounted, when it shall become due, renders the transaction usurious and void. By the statute of New York, the lenders at usury are liable to the forfeiture of the contract, and to a fine not exceeding one thousand dollars, and imprisonment for six months.—*Stockholder.*

## TELEGRAPH COMPANIES.

The receipts of the American Telegraph Company and the United States Telegraph Company, during the eleven months ending June 1st inst., were as follows:

AMERICAN TELEGRAPH COMPANY.

| Month. | Gross Receipts. |
|---|---|
| July, 1864 | $94,072 |
| August | 118,000 |
| September | 118,821 |
| Octoher | 124,000 |
| November | 107,476 |
| Decemher | 112,405 |
| January, 1865 | 112,614 |
| February | 118,861 |
| March | 141,056 |
| April | 132,223 |
| May | 125,789 |
| Total | $1,305,891 |

The Tax of five per cent. paid on the ahove amount was $65 294 75.

UNITED STATES TELEGRAPH COMPANY.

| Month. | Gross Receipts. |
|---|---|
| July, 1864 | $8,504 |
| August | 27,724 |
| Septemher | 31,111 |
| October | 28.666 |
| Novemher | 29,983 |
| December | 27.662 |
| January, 1865 | 33,662 |
| February | 42,199 |
| March | 50,078 |
| April | 56,086 |
| May | 56,000 |
| Total | $391,769 |

Amount of taxes, $16,788 82.

| | |
|---|---|
| American Telegraph Company, to Nov., 1864 | $30,086 12 |
| People's Line, to April, 1865 | 16,181 44 |
| Total | $46,267 56 |

Amount of taxes, $2,313 35.


Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express.. | 7:15 A. M. | 9:00 A M. |
| Springfield and St Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10: 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawranceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:20 A. M. | 9:40 P. M. |

Through Tickets can be obtained at the Burnet House. Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superinteodent.
T. B. LORD, Gen,l Ticket Agt.

1865.

CHANGE OF TIME!

By the Broad Road Gauge Route, the

Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI | 9:00 A. M. | 10:40 P. M. |
| HAMILTON | 9:57 " | 11:43 " |
| DAYTON | 11:30 " | 12:55 A. M. |
| SPRINGFIELD | 12:35 " | 1:45 " |
| URBANA | 1:40 P. M. | 2:15 " |
| GALLION | 5:25 " | 6:10 " |
| MANSFIELD | 6:50 " | 7:15 " |
| AKRON | 9:30 " | 10:00 " |
| RAVENNA | 10:05 " | 10:40 " |
| LEAVITTSBURG | 11:00 " | 11:40 " |
| GREENVILLE | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE | 1:20 " | 2:30 " |
| CORRY | 2:45 " | 3:55 " |
| Arrives SALAMANCA | 4:58 " | 2:55 " |
| NEW YORK | 10:30 P. M. | 1:00 " |
| BOSTON | 2:30 " | 8:00 A. M. |
| PITTSBURGH | 2:20 A. M. | 3:20 P. M |
| HARRISBURG | 1:30 P, M. | 2:45 A. M. |
| PHILADELPHIA | 5:35 " | 6:55 " |
| BALTIMORE | 5:45 " | 7:00 " |
| WASHINGTON CITY | 9:05 " | 10:35 " |

The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA.

Passengers to the Eastern Cities will find the

Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for all Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLARE Su
J. P. SARVER, } Passenger Agen
CHAS. COOK, }

# COUPON AND LOCAL TICKETS!

CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

CONSECUTIVELY NUMBERED

## COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

WRIGHTSON & CO.,

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD.


## GOVERNMENT TRANSPORTATION.

GENERAL ORDERS No. 17.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., March 16, 1865.

1st. For the purpose of producing uniformity in the Transportation service and guarding against abuses, blank books of Transportation Orders will hereafter be issued from this office to the Chief Quartermaster of each Department, to be by him immediately furnished to each officer under his order entitled to issue the same; after the receip of which no other form will be used, unless in emergencies when the prescribed blank form cannot he had, and then the reason for not using it must be stated in the order.

These blank orders will be numbered and registered in this office in such manner that there will never be two orders of the same number in circulation; they will be charged to the Chief Quartermaster to whom sent, who will in like manner charge and hold responsible his subordinate officers.

On exchange of posts, or on transfer to another officer, like receipts must he taken and forwarded to the Chief Quartermaster of each Department.

2d. Within five days after the end of each month, a concise report will be made to the Department Quartermaster of the number of orders issued, the number cancelled by error (which must accompany the report), and the number remaining on hand, with a statement of the amount of transportation furnished in the month; which report in a condensed form (accompanied by the orders so cancelled) will be by him immediately transmitted to the Quartermaster General, under envelope, endorsed on margin "Rail and River Transportation."

3d. The marginal register should contain the substance of the order issued, and will be preserved by the officer issuing for his own protection, or return to the Department Quartermaster or this office, as may be hereafter required.

*Care should be taken at all times to keep on hand a sufficient supply of these blank orders*, which can be obtained upon application to the proper Senior or Department Quartermaster.

4th. Unless in extraordinary circumstances, all rail and river transportation, passenger and freight, at any post, will hereafter be under the control and management of a single officer, on whom requisitions will be made by other officers requiring transportation.

5th. When more than five persons, in one party, are to be transported over one road, or a continuous line of roads, separate orders for transportation must be issued for each road to be passed over These orders should be received on the train instead of tickets, and are to be receipted by the party named in the order, and given up on the cars—the officers, or persons in charge, filling the receipt with the number actually carried. Five persons, or a less number, may be carried over a continuous line of roads upon a single order for transportation, and this order may be exchanged at the starting-point for tickets over the entire route.

6th. Settlement should not be made nor vouchers given to railroads on orders for passenger transportation properly belonging to other roads, but the *passenger* accounts for each road should be made up separately in the name of the roads to which they belong.

7th. Appletons' Railway Guide for January, 1865, will be used as a standard for indicating routes and fixing distances, unless the actual distance is proved to be less, in which case settlement will be made on the basis of actual distance. Where this Guide cannot be more readily procured it can be furnished from this office.

8th. When a number of troops are to be transported from any point to any other point, on the same day or train, it should be done in squads as far as practicable. A single transportation order, or set of orders, should be given to the ranking officer, or most responsible person of the several detachments.

9th. Blank books of Free Transportation Orders will also be furnished, to be used on boats belonging to, or in the service of, the Quartermaster's Department, or on railroads operated by the Government. The free passes in these books will be given to persons entitled to receive Government transportation, and should not be issued without designating on the order the boat or road on or over which the person is to be transported. The marginal registers in these books will also be preserved for return to the Department Quartermaster, or to this office, as may from time to time be required.

Should the route to be traveled be in part over roads or on those owned by private parties or companies, care should be taken that Free and Pay Orders are given as the case may require, or such requisitions furnished as will enable the party entitled to transportation to procure it at points where pay transportation commences.

10th. To warrant the granting of transportation, except in cases specified by Regulations or General Orders, published for general information, the person demanding the same should show a requisition or order from competent authority requiring the movement by public conveyance the performance of public duty.

The original requisition, when not necessarily required by the officer presenting it should be retained by the officer furnishing the transportation; in other cases, a certified copy or necessary extract from the order should be furnished to, and preserved by the officer granting transportation as his proper authority therefor, and a certified copy of the same must be endorsed on the back of the order.

11th. When the cost of transportation is to be reimbursed to the Government, as in the case of sick and furloughed soldiers, the required certificate should not only be made upon the furlough or order, but the transportation order should also be endorsed on the back substantially as follow: "The within transportation, furnished under General Order ——, and the proper officers duly notified. —— ——
A. Q. M."

12th. When transportation is granted to persons not in the military service, full explanations therefor should be given

13th. Orders for transportation should give the name of the party to be transported, or if there are several, then of the officer in charge, and state the number of men to be transported.

Orders for "one man," "ten men," and the like, without designating any name, are improper

14th. The receipts for transportation should be filled up in ink by the officer or person named in the order before signing, and if he cannot write his name, there should be a witness to his mark.

Names and places should be written distinctly in full, and not abbreviated.

15th. Duplicates of orders for passenger transportation should not be issued.

16th. When a requisition calls for transportation to any given point and return, the order should be issued to the place of destination, and the return transportation should be obtained at that point, provided it can there be procured.

17th. Upon the form of order now issued should be presented all the facts necessary to enable an auditing officer to decide as to the regularity or propriety of the order, so that it may be paid by any authorized disbursing officer.

18th. Erasures, interlineations, or alterations, if made against the interest of the Government, should be explained on the order by the issuing or other competent officer; otherwise, the transportation should only be settled for in accordance with the order before change or mollification.

19th. Transportation by water being generally the cheapest should be selected when consistent with the interests of the service All transportation should be furnished by the shortest practicable route, unless a different route is indicated in the order which directs the movement. Where there are two or more competing routes without material difference in distance or time, the business should be divided in equitable proportion between them, the distance for which compensation is made being estimated by the shortest practicable route.

20th. In no case is subsistence furnished by the Quartermaster's Department.

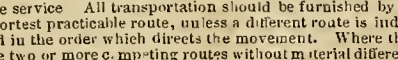
21st. The good of the service requiring that railroads should obey the requisitions of officers properly authorized to demand transportation, in case compensation is made by the Government for illegal or unauthorized transportation so required, the officer making the requisition or issuing the order will be charged therewith, or if not paid by the Government, the railroad will be entitled to recourse upon such officer.

By order of the Quartermaster-General.

LEWIS B. PARSONS.

*Colonel, and Chief of Rail and River Transportation.*


## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

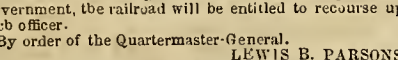
H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

## Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Ciocinnati.....6:30 A. M., and 7: 0 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

## *STEAMSHIP COMPANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side-wheel STEAMSHIPS, between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | |
|---|---|
| WASHINGTON..... | 3,204 tuns, 900 horse-power. |
| LAFAYETTE..... | 3,204 tuns, 900 horse-power. |
| EUROPE..... | 3,254 tuns, 900 horse power. |
| FRANCE..... | (afloat), 900 horse power. |
| NAPOLEON III ..... | (afloat), 11,00 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its equivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building)..... | 3,412..... | ——— |
| ENGLAND (now building).. | 3,430..... | ——— |
| SCOTLAND (now building) | 3,430..... | ——— |
| ERIN..... | 3,310..... | Grace. |
| HELVETIA ..... | 3,315..... | Prowse. |
| PENNSYLVANIA ..... | 2,872..... | Grogau. |
| VIRGINIA..... | 2,872..... | Lewis. |
| LOUISIANA..... | 2,166..... | Applett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to

WILLIAMS & GUION, No. 71 Wall street.

For steerage passage apply to

640* WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). —The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN..... | $90 00 | STEERAGE..... | $30 00 |
| First Cabin to London.. | 95 00 | Steerage to London. | 34 00 |
| First Cabin to Paris.... | 105 00 | Steerage to Paris ... | 40 00 |
| First Cabin to Hamburg | 100 0 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30 Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR ..... 2,595 6-95 tuns.
WISLIAM R, BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge

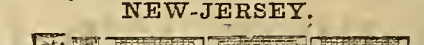
The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
640* JAMES A. RAYNOR, No. 10 Barclay street.

## CENTRAL RAILROAD
—OF—
## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6:40 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twedty Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a.m. (Ex.); 3:00 (Ex.) 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

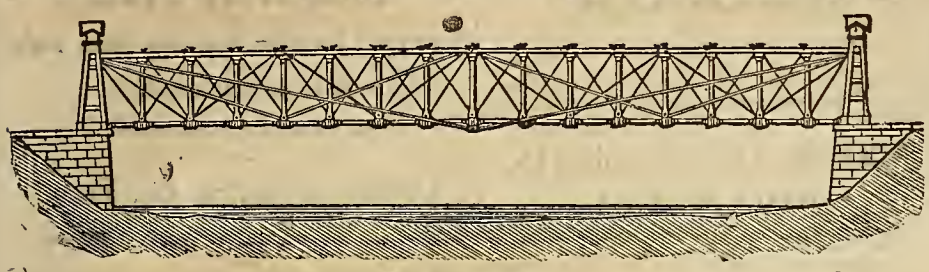
JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '53. 1y. Letter Box, 1392. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS O[F]

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible] Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or not of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines. 419 y1

---

## KNOX & SHAIN,

**Engineering and Telegraphic**

INSTRUMENT-MAKERS,

**PHILADELPHIA.**

---

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES.**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS.

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles,**

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

## Manufacturers, Importers & Dealers

—IN—

**RAILROAD, CAR,**

—AND—

**MACHINE SHOP**

**SUPPLIES,**

—AND—

**MACHINERY OF EVERY DESCRIPSION**

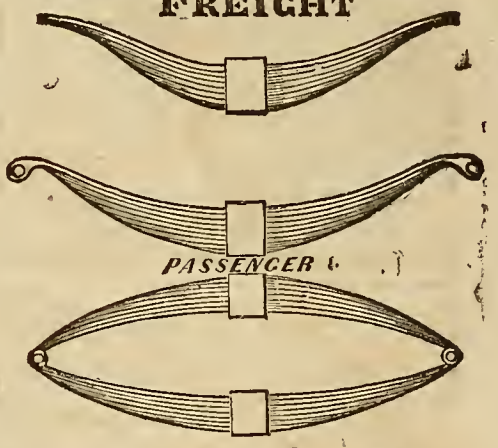
47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

## RAILWAY SPRINGS.

**FREIGHT**




THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock. Bonds and other Securities on commisson only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by w nnning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest Central West and Southwest At Harper's Ferry with the Winchester road At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $2,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH, *Master Transportation, Baltimor*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sle ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P M. |
| Mail and Express | 9 40 A M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P M. |
| Indionapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M. leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Abuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph! Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo Depart. | Arrive. |
|---|---|
| Mail | 7:20 A. M 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT General Ticket Agent

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:26 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Snt. 2 MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅛ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!!**



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P. M.

☞Through connections made for all points East a Wes

WM. EARNS Supt

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, SEPTEMBER 7, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

**SUBSCRIPTIONS—$3 Per Annum, in Advance.**

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

| *Little Miami—* | *Depart.* | *Arrive.* |
|---|---|---|
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| Morrow Accommodation | 5:20 P. M. | 7:45 A. M. |
| *Atlantic & Great Western—* | | |
| Morning Express | 9:40 A. M. | 7:20 A. M. |
| Night Express | 10:50 P. M. | 6:30 P. M |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A M. | 9:45 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Toledo, Detroit and Huntsville | 5:00 P. M. | 12:50 P. M |
| Richmond and Chicago | 6:00 P. M. | 12:25 A. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | | 7:55 A M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M. |
| Indianapolis & Cambridge City | 6:00 A. M. | 10:05 P. M. |
| " " " | 4:00 P. M. | 12:25 P. M. |
| Eastern Night Express | 10:50 P. M. | 7:50 A. M |
| Mail and Express | 9:40 A. M. | 6:30 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Springfield and St. Joe Express | 1:00 P. M. | 5:07 P. M. |
| St. Louis and Chicago Express | 10:00 P. M. | 5:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 5:15 P. M. | 8:20 A. M. |
| Harrison Accommodation | 9:30 A. M. | 8:40 P. M. |
| Chicago and St. Louis Express | 7:15 A. M. | 9:00 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 6:00 A. M. | 10:00 P. M. |
| Connersville, Cambridge City & Indianapolis Express | 4:00 P. M. | 12:25 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 7:45 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:12 P. M. |
| Evening Express | 2:35 P. M. | 6:09 A. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## THE VALUE OF INVENTIONS TO THE POORER CLASSES.

It is one of the felicitons experiences of modern times, that reflects the idea which was prevalent among the body of the people one hundred years ago, and even much later, that machinery in manufacturing and in locomotion is injurious to the interests of laborers in general, and to some classes of farmers. Riots ensued upon the invention of the spinning jenny, by Arkwright, which time proved to be without reason; a temporary injury, doubtless, resulted from the introduction of that machinery, and from the invention of Cartwright's power-loom; but the injury was confined to individuals. The *general* interests of those engaged in manufacturing cotton were largely promoted both by the spinning jenny and the power-loom. The interests of labor in general, outside of the manufacture of cotton, were greatly promoted by those inventions, independently of the vast benefits resulting to the cotton manufacture in particular. It is true that these inventions have been and may be oppressively abused by capital, in respect to laborers; and it is true that *before* these inventions, capital was occasionally used to dole out a scant subsistence to labor. It is *grasping avarice*, it is *the insatiate love of gain*, which causes occasional acts of this species of tyranny, and *not inventions*. The general tendency of inventions is to increase the means, at least *relatively*, of the laboring classes, and to enlarge their sphere of enjoyment. Scarcely is there an invention that can be named that has so largely contributed to increase the enjoyments of persons of small means, as that of railroads.

Years ago, when we were far from having, in any part of the world, the varied experience and knowledge which we now possess of the effects of railroads, the *Edinburgh Review* (April, 1851) on Mr. William Johnston's book, "England as it is," discussed this subject in a masterly manner, and I can not do better to show their improving influences on the general condition of the laboring classes, than to quote from this article. Mr. Johnston had asserted that "the inventions of science have not ben efited the poorer classes." On this, the *Review* remarks:

"Have they not? Look at railroads, the great scientific marvel of the age, which in the course of twenty years havo brought the remotest parts of our island within twenty-four hours of each other, which have quintupled our locomotive speed, and multiplied the amount of our locomotion in a ratio that baffles calculation. Who have been the chief gainers by them? Clearly the poor, to whom formerly locomotion was a thing almost impossible, who, for the most part, passed the whole of life in the narrow circuit of their native hamlet, or the town in which they were apprenticed; who frequently lived and died without visiting the next valley, or crossing the range of the low hills which were ever before their eyes; who, if compelled by dire necessity to travel, trudged painfully on foot, weary, limping, and heavy laden; who, on their rare holidays, could find no recreation but wandering in familiar fields, or boozing at the wonted tavern. The wealthy could always travel in luxurious carriages, with spirited post horses, which carried them along at the rate of eighteen pence a mile. The middle classes indulged their restless or curious propensities on the top of the mail coach, a mode of conveyance to which now they look back with affection and respect. But the poor till this great application of science, to their use, were absolutely rooted to their place of birth; they heard of Loudon, or York, or the mountains, or the lakes, as distant scenes replete with wonders and attractions, but as inaccessible as Paradise to them. Now, every find Sunday, every summer holiday, sees hundreds of thousands of artisans rush from the smoky recesses of Liverpool or London, to make merry with their friends, or refresh themselves after a week of toil with the gay verdure and invigorating air of the country. For the smallest sums they are carried in short trips to see York Minster, or to wander on the cliffs of Scarborough, or bathe in the sea at Dover; they are poured out in multitudes on the shores of Windermere; and conveyed, almost without any intervention of their own, to London, to Dublin, to Paris, at a cost which few among them cannot, by an effort, manage to afford. What these new facilities must have done to counter-balance and compete with the low pleasures of intemperance and gambling, how they have interfered with cock-fights, unpeopled the race course, and replaced the bull-bait, may be easily conceived. A 'cheap trip' is now, with the artizan class, the established mode of passing a leisure day. In 1848, the number who left Manchester alone, in Whitsun week, by these excursion trains was 116,000; in 1849, it had risen to 150,000; and last year it reached 202,000. Mr. Johnston himself gives a table (vol. I. p. 285) which should have prevented him from penning the rash sentence wo have quoted from him, on the uselessness of scientific improvements to the poor. In 1849 the number who traveled by railway was as follows:

| | Passengers. | Receipts. |
|---|---|---|
| First Class, | 7,292,811 | £1,927,768 |
| Second | 23,521,650 | 2,530,968 |
| Third and Parliamentary, | 32,890,323 | 1,816,476 |

"Thus it appears that the poorer classes traveled by railway to the number of nearly 33,000,000, and could afford to spend in that mode of recreation nearly two millions of pounds sterling. They out-numbered the middle classes in the proportion of *four to three*, and the wealthier classes in the proportion of *four to one.*"

These observations might be enlarged, but for the present will suffice. W. A.

## AMERICAN AGRICULTURE, AND ITS CONDITION, IN AUGUST 1865.

Notwithstanding, there is a great deal more constantly said and written about commerce, manufactures, and banking, than there is about agriculture (that common, every-day, humdrum business, which has been pursued since the days of Adam,) yet beyond doubt, all other kinds of business are dependant upon this. If we could imagine such a thing as a general failure of crops, the world would stand aghast, and famine would be in the land. What is commonly talked about as a failure of this or that crop, or a short crop here and there, are but small abatements, a mere fraction of that vast crop of agricultural products, which are necessary for the consumption of mankind. Famines have ceased in the world; because there is more industry, more commerce with distant regions, so that the wants of one may be supplied by the abundance of the other; and bind true civilization and science. Still, there are partial failures of crops, which very much disturb the state of the markets, and occasion absolute suffering in some districts. The United States is a great agricultural country; and if there should be even a partial failure, in this country, it would be not only injurious here, but would disturb commerce in a large portion of the world.

It is worth while, therefore, to look carefully into the condition of agriculture here. We have before us the report of the department of agriculture for August, 1865, with full information upon all points, in relation to the present crops. Availing ourselves of its facts, and our own information, we can arrive at very nearly the present state of our crops, and what may be expected.

1. Of the seasons. The weather, in the summer of 1865, has been the most remarkable of any we have ever known. In the three months of June, July, and August, half as much rain has fallen as usually falls in a year. It would be more correct, perhaps, to say the three months of May, June, and July; but the rains of August have been full and abundant also. In the neighborhood of Cincinnati, the fall of rain was 17 or 18 inches in depth for three month; and this is beyond all precedent. The following is a table of rain for May, June, and July, in 1863 and 1864.

| | 1863. | 1864. |
|---|---|---|
| May | 2.84 inches | 2.34 inches |
| June | 3.11 " | 3.43 " |
| July | 3.21 " | 1.25 " |
| Total for the year, | 41.1 inch. | 34.5 inches. |

Here, we observe that in the year 1863, the three months of May, June, and July give 9.16 inches, and for 1864, 7.02 inches. The first was but a little over half what the quantity has been this year; and the last year, not half. The fall of water this year in the three months is 17 inches or nearly one-half the average for a year. The effect of this varied, according to the condition of the crop; but, the worst of it fell upon the wheat.

2. Of the wheat deficiency. The causes of the reduction of the wheat crop are thus given in the agricultural report:

"The wheat crop of 1865 has been affected with almost every evil that so much besets the cereal. The prospect of an unprecedented yield was fine until the blossoming, when heavy rains fell, washing away the pollen, so that there was no fertilization. Large, finely grown heads were almost without a single grain.

"Then followed rust, occasioned by rains and cold nights, which were very prevalent from Kentucky to Wisconsin. In localities the chinch-bug was destructive; but there were large portions of the country in which these evils were light, and the promise of an average crop was good until harvest, when heavy rains, daily falling, continued during the entire month of July, causing the wheat to sprout badly over the entire west, except in Wisconsin and Minnesota, to which States, however, the rains have extended since the first day of August, and they also may have suffered injury in their outstanding harvests. The extent of the injury by these rains can not be fully known until our next (September) report.

"These remarks are applicable to the west. In the middle and eastern States the crop of wheat is little injured, but on account of the heavy growth of straw, and the too rapid ripening, which is a consequence of it, the grain may be found somewhat shriveled upon threshing."

But, it must be remembered, that where the wheat crop was good, there was little grown. The great supply of wheat comes from the north-west. The *effect* on quantities, is thus given by the Agricultural Department:

WHEAT.—The returns of the winter and spring wheat exhibit a large decrease of this important crop. Calculations were made from them, and the result exhibits the following deficit:

| | Bushels. |
|---|---|
| Crop of 1864 | 160,695,823 |
| Estimated crop for 1865 | 134,454,125 |
| Decrease | 26,241,698 |

The loss is as follows:

| | |
|---|---|
| In the New England and middle States | 657,383 |
| In Maryland and Delaware | 1,719,571 |
| In the western and northwestern States | 23,864,744 |
| Total | 26,241,698 |

The comparison of five crops gives this result:

| | Bushels. |
|---|---|
| Wheat crop of 1859 | 138,809,133 |
| " " 1862 | 189,993,800 |
| " " 1863 | 191,068,239 |
| " " 1864 | 160,698,823 |
| " " 1865 | 134,457,125 |

The average of these crops is 162,960,000 bushels. According to this, the crop of 1865 is deficient 28,504,000 bushels. The average for the two years 1862 and 1863 is 190,000,000 bushels, and the deficiency of this year compared with *that*, is 56,000,000 of bushels. If, these statements are nearly correct, there is a very serious deficiency of our principal grain this year.

3. Of corn. The crop of maize is everywhere *in quality* good; but, as we have remarked before, there was unquestionably *less breadth* of land sown; and it remains to be seen, whether the late corn will ripen well. On the whole, we have no reason to expect a very large crop of corn.

Oats, hay, and pastures were good; consequently, the supply of food for animals is abundant, and butter and cheese would have been very abundant, but for the scarcity of cows. On the whole, the *monied value* of our crops will be less, than the average of the previous three years; but, will be amply enough for all the ordinary wants of the country.

The following table taken from the agricultural report is one of great interest to all persons, whether producers, consumers, or transporters.

EXPORTS AND PRICES OF FARM PRODUCE.

*Exports from New York of the leading agricultural products from January 1, 1865, to August 9, compared with those for the same time in 1864, and their prices in New York and Chicago.*

EXPORTS.

| ARTICLES. | From January 1, 1865, to August 9. | From Jan. 1, 1865, to August 9. |
|---|---|---|
| Wheat flour.....bbls. | 857,098 | 1,319,730 |
| Rye flour.....bbls. | 1,528 | 2,133 |
| Corn meal.....bbls. | 90,786 | 74,985 |
| Wheat.....bush. | 1,276,019 | 9,305,611 |
| Corn.....bush. | 879,624 | 478,614 |
| Rye.....bush. | 86,099 | 405 |
| Barley.....bush. | ..... | 150 |
| Oats.....bush. | 50,409 | 26,081 |
| Peas.....bush. | 31,148 | 151,208 |
| Cotton.....bales. | 31,754 | 24,877 |
| Hay.....bales. | 21,079 | 21,833 |
| Hops.....bales. | 13,110 | 17,226 |
| Leaf tobacco.....hhds. | 43,808 | 37,467 |
| Leaf tobacco.....pkgs. | 50,568 | 42,854 |
| Manufact'd tobacco..lbs. | 2,526,212 | 2,782,789 |
| Petroleum.....galls. | 5,857,898 | 10,568,795 |
| Pork.....bbls. | 82,517 | 96,626 |
| Beef.....bbls. | 25,400 | 25,624 |
| Beef.....tcs. | 37,454 | 41,290 |
| Cut meats.....lbs. | 28,239,087 | 83,254,745 |
| Butter.....lbs. | 8,485,132 | 7,044,258 |
| Cheese.....lbs. | 22,095,193 | 24,775,960 |
| Lard.....lbs. | 18,522,979 | 42,737,034 |
| Tallow.....lbs. | 13,838,753 | 23,638,985 |
| Wool (fleece).....lbs. | ..... | ..... |

PRICES.

| ARTICLES. | Prices, Aug. 9, 1865, New York. | Prices, Aug 12 1865, Chicago. |
|---|---|---|
| Wheat flour | $5 65 to $9 60 | $4 00 to $11 00 |
| Rye flour | 5 50 to 6 00 | 4 50 to 5 00 |
| Corn meal | 5 40 to 5 60 | ..... ..... |
| Wheat | 1 35 to 2 00 | 1 08 to 1 50 |
| Corn | 87 to 89 | 67 to 68 |
| Rye | 98 to 1 10 | 66½ to 68 |
| Barley | ... ..... | 1 05 to 1 07 |
| Oats | 61 to 62 | 42 to 45 |
| Peas | 1 30 to 1 36 | ..... ..... |
| Cotton | 45 ... | ... ... |
| Hay | 75 to 1 15 | 50 to 75 |

| | | | | |
|---|---|---|---|---|
| Hops | 10 to | 45* | 20 to | 43 |
| Leaf tobacco | 7½ to | 26 | ... | ... |
| Manufac. tobacco, | ... | ... | 50 to | 1 25 |
| Petroleum | 52½ to | 54 | ... | ..... |
| Pork | 29 00 to | 34 50 | 29 00 to | 31 00 |
| Beef | 8 00 to | 14 50 | 10 00 to | 13 00 |
| Cut meats | 15 to | 20 | 16 to | 18 |
| Butter | 23 to | 35 | 12 to | 22 |
| Cheese | 10 to | 15½ | 12 to | 18 |
| Lard | 19½ to | 24½ | 23½ to | 24 |
| Tallow | 11¾ to | 13 | 11¼ to | 12½ |
| Wool, (fleece) | 7½ to | 75 | 53 to | 60 |

* Prices of Hops are rapidly advancing, it being understood that the growing crop has been destroyed very extensively in New York by the lice. Further west it is thought to be safe.

## STATEMENT OF THE PUBLIC DEBT.

WASHINGTON, Aug. 2.

The official statement of the public debt as appears from the books, Treasurer's return and requisitions in the Treasury Department, on the 31st of July, shows the amount outstanding to be $2,757,253,275 86, divided thus:

Debt bearing interest in coin is $1,108,662,641 80, on which the interest is $64,521,837 50.

Debt bearing interest in lawful money, $1,289,156,545, on which the interest is $74,740,630 78.

Debt on which interest has ceased, $1,527,120.

Debt bearing no interest, $357,906,969.

The total interest both in coin and in lawful money is $139,262,568 28.

Legal tender notes in circulation, one and two years five per cent. notes, $39,954,230.

United States notes, old issue, $472,603.

United States notes, new issue, $432,687,966.

Compound interest notes, act of March 3d, 1863, $15,000,000.

Compound interest notes, act of June 30th, 1864, $197,121,470.

Total legal tenders in circulation, $685,236,269.

Amount of fractional currency, $25,750,000.

Uncalled for pay requisitions and miscellaneous war and navy, $15,736,000.

Amount in Treasury, coin, $35,338,000.

Currency, $81,402,000.

Total amount in Treasury, $116,739,632 59.

The statement of the public debt as appears by the returns and Treasury books on the 31st July, as compared with that made on the 31st of May, shows an increase of $122,000,000 during the intervening period, owing in part to the extraordinary sums required to pay the arrearages due to the army the entire public debt being $2,635,205,753.

The amount of legal tender notes now in circulation is $685,236,269, or an increase from May 31st of $26,075,700.

SURVEY OF THE MINNESOTA VALLEY RAILROAD ROUTE.—The General Land Office has just filed a map of the survey and line of route of the Minnesota Valley Railroad, the former embracing a stretch of country from township 137 and range 31, to township 145 and range 39. Instructions have been issued to local land agencies in the above State to withold from settlement the land lying on each side of the entire route to the depth of twenty miles. The Congressional act of March 3d, 1857, granted to Minnesota, for this railroad, six alternating sections of land to each mile of the route, and by the act of May 12, 1864, four additional alternating sections per mile, were granted to the same road.

## STATISTICS OF HORSES.

The following table of "Horses" in the United States, and their distribution, is taken from Mr. Kennedy's Compendium of the Census Statistics of the United States.

HORSES.

There were in the States and Territories 4,336,719 horses, in 1850, and 6,249,174 in 1860.

The following table shows the number of horses in the New England States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| Connecticut | 33,276 | 26,879 |
| Maine | 60,637 | 41,721 |
| New Hampshire | 41,101 | 34,233 |
| Massachusetts | 47,786 | 42,216 |
| Rhode Island | 7,121 | 6,168 |
| Vermont | 69,071 | 61,057 |
| Total | 258,992 | 212,274 |

Vermont has more horses than any other New England State. Maine comes next, and then in order succeed Massachusetts, New Hampshire, and Connecticut. There were 212,274 horses in the New England States in 1850, and 258,992 in 1860, showing an increase of nearly 47,000.

The following table shows the number of horsesin the middle States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| New York | 503,735 | 447,014 |
| New Jersey | 79,707 | 63,955 |
| Pennsylvania | 437,654 | 350,398 |
| Delaware | 16,562 | 13,852 |
| Maryland | 93,406 | 75,684 |
| District of Columbia | 641 | 824 |
| Total | 1,131,695 | 951,727 |

There are a little over 1,000,000 horses in the middle States. New York has about 500,000, and Pennsylvania only about 60,000 less than New York. Maryland has about 93,500, and New Jersey nearly 80,000.

The following table shows the number of horses in the western States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| Illinois | 563,736 | 267,653 |
| Indiana | 520,677 | 314,299 |
| Iowa | 175,088 | 38,536 |
| Kansas | 20,344 | ..... |
| Kentucky | 355,704 | 315,682 |
| Michigan | 136,917 | 58,506 |
| Minnesota | 17,065 | 860 |
| Missouri | 361,874 | 225,319 |
| Ohio | 625,346 | 463,397 |
| Wisconsin | 116,180 | 30,179 |
| Nebraska | 4,449 | ..... |
| Total | 2,897,380 | 1,714,431 |

There were 1,714,431 horses in the western States in 1850, and 2,897,380 in 1860, an increase of over 1,000,000. Ohio has more horses than any other western State, or 625,346. Illinois and Indiana have each over 500,000; Missouri 361,874, and Kentucky 355,704. These five States have over 2,500,000 horses, while all the other States have less than 500,000.

The following table shows the number of horses in the southern States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| Alabama | 127,063 | 128,001 |
| Arkansas | 140,198 | 60,107 |
| Florida | 13,446 | 10,848 |
| Georgia | 130,771 | 151,331 |
| Louisiana | 78,703 | 89,514 |
| Mississippi | 117,571 | 115,460 |
| North Carolina | 150,661 | 148,693 |
| South Carolina | 81,125 | 97,171 |
| Tennessee | 209,882 | 70,636 |
| Texas | 325,698 | 76,760 |
| Virginia | 287,579 | 272,403 |
| Total | 1,743,697 | 1,421,014 |

There are less than one and three-fourths million horses in the southern States. Of these over one-sixth are in Texas, and nearly one-sixth in Tennessee. Virginia stands third, having 287,579 horses. There are more horses in Texas, Tennessee, and Virginia, than in all the other southern States together.

The following table shows the number of horses in the Pacific States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| California | 160,610 | 21,719 |
| Oregon | 36,772 | 8,046 |
| New Mexico | 10,066 | 5,079 |
| Utah | 4,565 | 2,429 |
| Washington | 4,772 | ..... |
| Total | 216,785 | 37,273 |

There are 216,785 horses in the Pacific States. Of this number California has 160,610.

The following table shows the number of inhabitants to each horse in the different sections of the United States in 1860 and in 1850:

| | 1860. | 1850. |
|---|---|---|
| New England States | 12.10 | 12.85 |
| Middle States | 7.36 | 2.96 |
| Western States | 3.54 | 2.50 |
| Southern States | 5.33 | 5.04 |
| Pacific States | 2 54 | 4.79 |
| U. S. and Territories | 5.03 | 5.34 |

In the United States there were in 1850 one hundred horses to every 534 inhabitants, and in 1860 one hundred horses to every 508 persons.

In the New England States there were only one hundred horses to every 1,285 inhabitants in 1850, and one hundred horses to every 1,210 inhabitants in 1860. In other words, the increase in the number of horses in the New England States has fully kept pace with the increase in population.

In the middle States there were 696 persons to every one hundred horses in 1850, and 736 in 1860. The increase in the number of horses does not keep pace with the increase in population. It will be seen, however, that there are nearly double the number of horses in proportion to population in the middle States than in the New England States.

In the Western States there were in 1850 one hundred horses to every 250 inhabitants, and

in 1860 one hundred horses to every 354 inhabitants- In 1850 every family of five persons, on the average, in the western States owned a team; since then the increase in the population has been much greater than the increase in the number of horses. Even now, however, there are two horses to every seven inhabitants.

In the Southern States there is about one horse to every five inhabitants.

There are more horses in the Pacific States, in proportion to population, than in any other section. There are now about two horses to every five persons, or about the same proportion as there was in the West in 1850. There are now nearly double the number of horses in the Pacific States in proportion to population than there was in 1850.

## NATIONAL DEBTS.

The following table from the *R R. Journal* will show both the amounts and the *proportions* of various national debts. It should be reduced to dollars, 5 for 1:

The State of New York contains 47,000 square miles, and in 1860 had a population of 3,880,735. What should we think, however, if we in this State had to carry a debt of $465,000,000, the amount of the Holland debt; yet that we should be able to do so, if in that unhappy condition, can not well be doubted, if we regard area and population. The city of Hamburg has a debt which per capita on its population is $104 64, having a population of about 153,000 and an area of but about 133 square miles; and still it flourishes. We give the rest of the table we have already alluded to, not vouching, however, for its accuracy:

| *Countries.* | *National Debt.* | *Population.* | *Per Head.* £ | s. d. |
|---|---|---|---|---|
| France..... | £400,000,000 | 36,500,000 | 11 | 0 0 |
| Portugal.... | 30,000,000 | 4,000,000 | 7 | 10 0 |
| Spain ..... | 107,000.000 | 16,000,000 | 6 | 13 0 |
| Austria..... | 224,000,000 | 35,000,000 | 6 | 8 0 |
| Belgium .... | 26,200,000 | 4,500,000 | 5 | 15 9 |
| Bavaria ..... | 26,000,000 | 4,600,000 | 5 | 14 0 |
| Hanover .... | 7,900,000 | 1,800,000 | 3 | 15 0 |
| Brunswick.. | 1,500,000 | 273,000 | 5 | 5 8 |
| Saxony..... | 9,500,000 | 2,100,000 | 4 | 10 0 |
| Denmark ... | 12,000,000 | 2,600,000 | 4 | 9 0 |
| Greece ..... | 4,000,000 | 1,070,000 | 3 | 14 0 |
| Russia ..... | 231,000,000 | 75,000,000 | 3 | 1 3 |
| Prussia..... | 42,000,000 | 18,000,000 | 2 | 7 0 |
| Wurtenb'g.. | 5,000,000 | 1,700,000 | 2 | 19 0 |
| Oldenb'g.... | 600,000 | 294,000 | 2 | 0 2 |
| Brazil ..... | 15,400,000 | 7,700,000 | 1 | 19 2 |
| Chile ..... | 1,500,000 | 1,400,000 | 1 | 2 9 |
| Norway ..... | 1,500,000 | 1,500,000 | 1 | 9 2 |
| Sweden..... | 1,700,000 | 3,700,000 | 0 | 9 2 |

It will appear from this, that the countries with the least public debt and per capita liability, are those with the least maritime power and national rank; a curious fact. From some of them, large emigration continues to the United States, so that other considerations than taxation enter into the minds of the people, or they would not seek to change their position as residents of a country comparatively free from debt, for one unfortunately saddled, by means of a rebellion, with a very heavy one. From these facts, however, we may infer that we are fully able to meet our liabilities, by the ordinary means open to other governments not only, but by the rapid increase of our population and resources, nowhere rivalled on this globe in growth or industry.

## WEST VIRGINIA.

The following truly valuable description of the resources of West Virginia, by C. S. Richardson Esq., is exceedingly interesting, and is, with the exception of the beauties of the hotels at Wheeling, we think, a thoughtful picture. The great point of the article is to attract the attention of capitalists to the vast undeveloped mineral wealth of this new-born state, and facilitate the construction of the West Virginia Railroad, both of which are worthy, and will be eventually profitable, investments:

West Virginia may justly be called a land of hills and valleys, for there is scarcely a plain one mile in width throughout the State; it is, therefore, not an agricultural country, although many parts are susceptible of conversion into extensive grazing districts, on which large herds of cattle can be and are produced. Its chief wealth lies in the abundancy of its minerals. There are ten prominent rivers intersect the State; all of these flow into the Ohio, which forms its western boundary; they are the Cheat River, Tygarts Valley River, the West Fork of the Monongahela, Little Kanawha, Elk, Big Kanawha, Gauley, Coal River, the Guyan, and the Big Sandy, the latter dividing the State from Kentucky. The countries bordering each of these streams differ somewhat in their respective products and commercial aspects. The Cheat, Tygarts, and West Fork, which are but large branches of the Monongahela, a river whose union with the Alleghany forms the noble Ohio, contribute their coal and iron ores to supply the great iron works of Pittsburg; in some of these valleys are very beautiful farms, rich with an alluvial soil and abundantly productive. The Little Kanawha, at whose confluence with the Ohio stands the flourishing and rapidly extending little town of Parkersburg, abounds in petroleum, and has been often considered the centre of the oil district of West Virginia. The Elk is a beautiful river, about 150 miles long; it empties itself into the Big Kanawha at Charleston. This valley is destined to become the great highway of the State; it is celebrated for the richness and purity of its cannel coal; specimens from one part (the Falling Rock Mines) are unequalled by any in the world. Fine oil works have been erected, and with the return of peaceful times the districts in which they are located will present a scene of busy industry. Iron ore of various descriptions, excellent in quality and profuse in quantity, are found throughout. The Big Kanawha, the finest river in the State, is navigable for 100 miles; several steamboats ply daily up as far as Charleston, 60 miles from its mouth, while smaller steamers run weekly to Cannelton, and occasionally up to the Falls, 40 miles above. The navigation is being rapidly improved by dredging the shoals, so that in two years hence all the obstructions hitherto so detrimental to its carrying trade will be removed. Kanawha is chiefly celebrated for its extensive salt works, which are amongst the largest in the United States; when all the works are in full operation they are capable of producing from 2,000,000 to 3,000,000 bushels of the best quality salt annually. Coal and cannel mines are found all along the river. Oil works, for the production of cannel oil, are carried on to some considerable extent, and preparations are making for their extension. Charleston, the county seat of Kanawha, is a town of 3,000 inhabitants; it carries on a brisk trade—boat building and cooperage, which are adjuncts of the salt manufacture, with some wool carding. Saw and flour mills are the chief business of the town. The merchants are all prosperous, as an index of which it has been affirmed there has not been more than three cases of positive bankruptcy during the past nine years. Iron-works and machine-shops, ship-yards, agricultural implements, wood-working and other factories are very much wanted here; an immense trade could be profitably carried on if such were permanently established. There is a splendid opening also for a large transportation company, there not being one worthy of the name at present on the river; should one be established with an efficient flotilla, they could be assured at this time 1000 tons a day freight. Charleston must become the great trade centre, and should be the capital of the new State. The Gauley River is a tributary the Kanawha, it traverses a thinly settled mountaneous country. The timber of this section is very fine and abundant; its head branches are in Greenbriar county, a place celebrated for its mineral waters; here is situated that place of fashionable resort, White Sulphur Springs, the medicinal virtues of which are proverbial throughout the country. Coal River is also a confluent of the Kanawha; it runs in a south-easterly direction for 130 miles, is a rapid stream, subject to droughts in summer and inundating floods in winter; it contains the most productive cannel mines in the State; those of Peytona have hitherto supplied New Orleans and other southern cities with their best gas coals. The great Briarport Mines (seven years the residence of the author) are on this river; they are noted for their variety, quality and quantity of their coals. These lands yield 25,000 tons to the acre above water level, and, as far as yet known by borings in the adjoining valley, 30,000 tons below. A railroad is now in contemplation to connect the Kanawha Valley with the heart of this coal field; when completed, 2,000,000 tons of coal, coke and cannel may annually be exported to the south and western markets. The Guyan is a long river; it enters the Ohio near the extreme western corner of the State; it contains heavy beds of iron ore and some coal. The finest shipbuilding timber—white oak—ever found in this country remains yet undisturbed in its back forests. We have recently returned from an exploring expedition on its upper branches, and can give a very favorable account of the "oil prospects," having met with numerous gas and oil springs during our journey. The most interesting feature of the country, however, was the stately timbers of its deep valleys. The tulip-poplar, a wood in great request here, is found of colossal size; we have seen trees from 5 to 6 feet diameter at the butt, nearly 100 feet high to the first limb, and as straight as a line. At one place, in Big Uuly Creek, a branch of Mud River, we estimated there might be cut 5000 cubic feet of marketable timber to the acre. The soil of the bottom land is exceedingly rich, and as the climate is so very mild every kind of agricultural produce may be raised to advantage. The Big Sandy River forms the dividing line between the two States of Virginia and Kentucky; it abounds in coal, iron, cannel, oil salt, timber and cattle. No great developments have yet been made in its minerals; several mines, however, have been opened and they are found rich and productive. The three last named rivers have all been made navigable, by locks and dams, for 30 or 40 miles into the interior; but they are of very

uncertain utility, in consequence of the impetuosity and irregularity of their currents; no works, therefore, can be permanently carried on at profit whose produce depends for its exportation on the waters of these rivers. Wheeling, the present capital of the State, is a city of considerable importance; it is the terminus of the Baltimore and Ohio Railway, has several iron works, foundries, engine shops, mills, and factories of various kinds. As a commercial entrepot, it is not well located, being at the very extreme northern corner of the State; it has a prosperous and thriving trade, but which is far more due to the industry, perseverance, energy and intelligence of its citizens than to its location. With all its smoke and clatter of its noisy streets, we like Wheeling. There is a kind of freedom, openness and cordiality pervading all classes of its society, which is quite refreshing; its hotels are commodious; the M'Clure House is a fine establishing, certainly one of the very best in the State; charges moderate, with excellent accommodation. To the tourist, we should say, do not miss staying a day or two at Wheeling; you will be pleased with its beautiful scenery, its unique, pretty suspension bridge that spans the Ohio river. A ramble on the hills, and a peep into the numerous coal and iron mines, with a final stroll through its workshops, and among the numerous steamers that line the levee, will give you a good insight to what this city is, and what several others in West Virginia may some day become. The foregoing cursory portraiture of West Virginia's mineral resources is too condensed for the reader to justly appreciate them; be will, however, not fail to see in them the primary elements of national wealth, and that their utilization is only in abeyance on their development. Oil and oil making are now the popular speculations of the day. The eminent success that attended the opening of the petroleum wells, at Burning Springs, on the Little Kanawha river, has caused quite a rush of investors from all parts of the eastern States. Individual fortunes have been made, and many are in anticipation. All is activity, eagerness and bustle around this oleaginous region for many miles, and land in the vicinity of a successful "strike" rises to a most fabulous price. We have known creek lands, which six years ago would have been considered dear at $5 per acre, find ready purchase at $5,000. At the present time there can not be less than 300 wells in course of sinking in different parts of the country, and new companies are forming almost every day. The yield of petroleum is not great from any single well. Very few are flowing wells. Pumping must be resorted to in 90 cases out of 100. Every one which is successful thus gives a little, for, like the lean cows on a winter dairy farm, "the milking of many teats brings a big bucket full at last," so the pumping from numerous wells, when sent to market, make a considerable bulk, These operations are not confined to any special locality; they extend from the Monongahela to the Kanawha Valley. Even the mountain districts are not left unpierced. We have this past week heard of several new strikes (as the discovery of oil is called when first tapped in the bore;) they are in widely different directions, and if the reports are verified by facts, the well-boring business will have a great expansion. Oil boring is a purely speculative enterprise; its profits may be very great, or *nil*. But cannel oil making is a certainty; with proficient management, economy, good coal, and ready transportation, a remunerative profit may invariably be realized. Eastern capitalists know this, hence there is an inquiry for good cannel lands all over the State, and we know of no better or safer investment, for it is certain such lands will never be less, while there is every probability of their rapidly advancing in price. The bituminous coal trade is about having a new start; several companies have been formed, and some of them got into operation. This article, in connection with the manufacture of iron, should, and we believe eventually will, constitute the chief staple of the State; why it has not hitherto been made so, must be attributed to those lamentable political conditions noticed at the commencement of the paper. The salt trade is not very lively just now. The southern trade for the past four years has been almost cut off; the blockade, however, is now raised, and the restrictions that have so long fettered the export trade will be speedily removed; then the old salt manufacturers may once more persue "the even tenor of their way." The timber trade is almost at a stand, although the demand is enormous; this arises from want of capital, and the absence of lumbermen and others hitherto engaged in this line of business; the war demands have drawn largely on this class of hardy pioneers, but they worked vigorously while they were away, and struck deep at the roots of that evil tree "which bringeth not good fruit." Their task is now done; the rifle is being thrown aside, and once more giving place to that harbinger of civilization, the axe; long may they yield it in peace, and we hope never again have to apply it to ady other demolition than that of the forest. We now come to a subject the most engrossing of all, one on which the vitality of the new State's progress in wealth chiefly depends, and one in which both European and American capitalists are equally interested—the West Virginia Central Railroad. This important undertaking, for which an act has recently passed the Legislature, is to go from Charleston to Grafton, where it will intersect four other lines; its course principally takes the valley of the Elk, although it taps the Courthouse town of each county through which it passes; it strikes through the very heart of the great mineral region of the country, and when completed will open up thousands of industrial works, of which the present generation have no conception; it is alike in its advantages to the farmer, the miner, the manufacturer, the merchant, the capitalist and the government of the State. All will become recipients of its favors, and all should come forward and liberally subscribe toward its immediate construction. Its length is about 130 miles; there are no expensive or difficult engineering works anywhere along its route. Its cost will be about $4,000,000, and will take three years to complete; but long ere this is done, the traffic over each finished end of the line will pay common interest on the sub-scribed capital. Ths traffic tables, so far as estimated, show a working profit of 30 per cent.; this will afford a dividend of about 15 per cent. to the shareholders, and which may be increased as the trade of the country is opened up.

---

Oil in Los Angeles, California.—A dispatch dated at Los Angeles, July 17th, says the work of the Pinneer Oil Company is progressing very favoarbly. Their well is now three hundred and twenty-five feet deep. This morning there were fifteen feet of oil in the well. They are now boring through a stratum of shale. The indications of shortly striking a flow of oil are every day becoming more favorable.

## AMERICAN TARIFF AND BRITISH MANUFACTURES.

We have shown, in a previous article, that the idea of British free trade is a delusion, and the attempt to use the free trade argument in this country a gross imposition. There is no free trade in England or in Europe, if by free trade is meant unrestricted commerce. In the sense of unrestricted commerce all over the world, in which each nation shall stand on an equal footing with every other nation, the free trade argument, if not forcible, has at least an air of generous liberality among nations, which commends itself to our feelings, if not our interest. But so far from this being the fact, that no nation has adopted free trade as its policy, and so far from being presented to us in the light of a liberal concession to the general freedom of the world, the only ground on which it is placed is, that it is for our interest, in the long run; and the only reason given of the slightest force is, that we might buy some articles cheaper of other nations. The advocates of British interests in this country have been driven to admit that England has *not* adopted free trade; but that she has adopted it as far as she *can consistently with her best interests*. Exactly, and that is all we ask for America. We want not a dollar raised for the protection of America manufacture, which can not be clearly shown for the best interests of the American people.

We will now endeavor to show that it is for the interest of the American people, if they must raise a large revenue, (and such is and must be the case,) to arrange the tariff duties so as to favor American manufactures. When we *must* raise three hundred millions of dollars a year, we shall enter into no argument to show that a large part of that ought to be raised hy a tariff. We must do it, and there is the end of all argument; but we go further and say that if, by the internal tax on manufactures, the tariff is reduced (which is the fact,) it ought to be rearranged so as to put our leading manufactures beyond danger. That is all. That is the sum of what we contend for. In doing this we shall consider, first, the actual European competition with our manufacturing interests; secondly, the reduction of the tariff by the internal tax; and thirdly, the domestic markets now furnished the Western farmers by American manufactures.

1. What is the European competition with American industry? In the first place, we remark that an *injurious* competition is not necessarily one which absorbs the market, or one-third of it, but any quantity which by coming into the principal market, at lower rates than they can be made for here, acts as a continued underbidding against the manufacturers. Another remark is that this class of articles are so far from being all that the tariff is laid on, that they are only one-fourth; and that protecting American mannfacturers to the point of fair profits, in competition with Europe, is not prohibitory at all. Premising this, we give the tables below of imported articles, competing with our own. It is unfortunate for a discussion like this, that, with all the power of the American Government, although it can quell the rebels, it can not get its printing done within a year of the time it ought to be, and consequently we can not argue on the facts of the last current, and, in fact, for two years. We have only the complete tables of commerce for 1862—the year in which the smallest importatinns were made. We will give the importation of certain manufactures for both 1861 and 1862, in value:

| | 1861. | 1862. |
|---|---|---|
| Copper | $2,326,000 | $613,000 |
| Cotton | 23,700,000 | 8,890,000 |
| Indigo | 505,000 | ..... |
| Iron | 10,295,000 | 8,552,000 |
| Wool | 4,563,000 | 6,424,000 |
| Woolens | 26,000,000 | 15,365,000 |
| Total six articles | $62,389,000 | $39,844,000 |

The reduction in 1862 was solely due to the war, whose commercial effects had here reached their height. The total imports of the country were last year but $203,000,000, (two hundred and three millions,) but, in 1861, $356,000,000. The present rate of importations will bring the importations of the coming year up to $300,000,000, and then an aggregate importation of iron, cotton, wool and woolens, up to sixty millions. We mentioned indigo because indigo, prior to the introduction of the cotton trade, was a staple product of South Carolina, and might be again.

Dye stuffs, however, have been admitted free of duty—although many of them are grown in our country—on the principle that they are the materials of manufacture. This is the principle on which *coarse* wools were admitted free until the act of March, 1860, when a small duty was put on them.

Looking to the importation of the last four or five years as furnishing an average in time of peace, we find that *foreign competition*, with the principal American manufacturers of iron, cotton and woolens will amount to at least *sixty millions of dollars per annum*, distributed in something like the following proportions, viz:

| | |
|---|---|
| Iron | $15,000,000 |
| Cotton | 20,000,000 |
| Woolens | 25,000,000 |

Now, the question may be seriously asked, *why* should we import either of these? We see why we should import tea, coffee, silks, and, to a great extent, sugar, with dye stuffs, &c. These together amount to a hundred million per annum; and, together with other luxuries and various small articles, will make an aggregate of an hundred and fifty millions of dollars in imported articles—an amount equal to the aggregate *imported in any year prior to the year* 1850, *when we had a population of twenty millions.* When people talk, then, of cutting off foreign trade, and when Great Britain talks of commercial hostility, let them recollect that *more than half the aggregate of the vast imports of* 1859, *and* 1860 *were the mushroom growth of the previous ten years*, when the Southern politicians governed the United States, and enacted all commercial laws to increase the export of slave-grown cotton, and reduce the amount of American manufactures. Their scheme of policy was to increase the extent of slave territory and the quantity of slave-grown cotton, and increase the market for it by throwing open the ports of the United States to free trade with Great Britain and Europe. That this might be a sound policy for a short time to the small class of cotton growers, we are not disposed to deny. We say a short time, for the apparent prosperity of trade was like the boils on the human body, produced by inflammation of the blood, which, if there had been ten years more of such apparent prosperity, would have corrupted and festered.

There would have been no need of a rebellion, and a war, to make a ruin of the South, and commercially of the whole country. But if the scheme was a successful one to the cotton grower, what was it to the manufacturer? Its complete success would have destroyed every iron, cotton and woolen factory in the United States, except those small shops necessary for domestic convenience. This was the great secret of British sympathy with the South. The success of the cotton power in establishing free trade in European goods was the success of the British manufacturer. In one hundred and fifty years, both in our colonies and our national existence, England has aimed, by every possible mode, either of government over the colonies or of orders in council, and of commercial legislation, to destroy or retard American manufactures. At this very moment British agents and British free-traders are in this country seeking to reduce our tariff. This may be very good policy for England; but why should we pursue it? We ask again, why should we import any considerable amount of iron, cottons or woolens? If these things are at all necessary to us, no one need fear the tariff, for they will be imported in any event. But they are not necessary. It may be said, on the principle we have previously said, that the Government must have a revenue; that a prohibitory duty would destroy to that extent the revenue. We do not propose a prohibitory duty. We only propose to make the tariff such that it shall not be *in fact reduced by the internal revenue tax on manufactures*—in other words, that the competition between the foreign and domestic manufacturers shall be a fair one, taking into view the cheapness of English capital and the internal taxes in this country.

Looking to each of the above classes of manufactures we find that the great difficulty our iron works meet with is really from the cheapness of capital in England. In fact, reduced to their ultimate value, capital in England is worth about four per cent., and in this country seven per cent. Now, taking the capital in the *products* of the factories—a tariff of forty per cent. (as applied to the resulting profits) does not raise the cost of the English capital over six per cent. For whatever may be said about the details of production, it is on the profits of the capital that the tariff actually falls. The British manufacturer actually does export here with a forty per cent. tariff, and he will continue to do so, till it exceeds sixty per cent.

Now let us take wool and woolens. No business or industry involving no more capital, is of so great value to the country, as that of sheep and the woolen manufacture. Under the stimulus of the war and the indirect stimulus of diminished cotton manufactures, sheep and woolen factories have increased. Ohio has derived great profits from this source. A single woolen manufacturer of Philadelphia paid, in Ohio, *a million and a half dollars for wool.* We have now near, if not quite, five millions of sheep in Ohio; and if the woolen factories can be sustained, we shall receive *fifteen millions of dollars per annum for wool.* But not otherwise. When the South succeeded in establishing the quasi fur trade policy of 1846–7, which prevailed till 1857, sheep in Ohio actually diminished; and while they were humbugging the farmers of the West with their free trade cry, it was literally in Ohio "great cry and little wool." But what was it for the whole country? The story is easily told. While everything else in the country was increasing, the *number of sheep stood almost still.* Here are the figures:

| | |
|---|---|
| Number of sheep in 1850 | 21,723,220 |
| Number of sheep in 1860 | 22,471,275 |

The increase of ten years was but three per cent. Did the importations of foreign woolens help the farmer? The sheep of the Western States *actually diminished in the ratio* of 140 *to* 88, as shown by the census tables. Such was the direct consequence of the vast fraud palmed off by Southern politicians on the credulity of Western farmers.

## POPULATION OF CHICAGO.

The census just taken by Wellington Warren, Esq., by State authority, gives the population of this city on the 1st of August at 177,956. This is certainly not so large as many have calculated upon, but it is abundantly large enough to satisfy any reasonable admirer of the Garden City. There needs no 15 per cent. to be added by way of a "supplimentary return" to show that Chicago is the most remarkable city in the world in growth of population or wealth. Here is her official census for thirty-five years past:

| | |
|---|---|
| 1830 | 70 |
| 1835 | 3,265 |
| 1840 | 4,479 |
| 1845 | 12,088 |
| 1850 | 29,967 |
| 1855 | 80,023 |
| 1860 | 109,263 |
| 1865 | 177,956 |

An examination of these figures shows that Chicago has doubled in the past eight years and a half, and quadrupled in the last thirteen and a half. Allowing it to require sixty per cent. longer time for each successive doubling, and the prospective growth of the city would be, and we predict *will be*, somewhat as follows:

| | |
|---|---|
| 1878 | 355,912 |
| 1900 | 711,824 |
| 1934 | 1,423,648 |

This will not be fast enough, perhaps, for some of our readers, but it is surely a grand future to look upon, in the thought that there are those now living in this city who shall see it nearly one half larger than any other now on the continent. We believe our growth in the past warrants such an anticipation in the future; a future so dazzling we can not bring ourselves to raise the veil for a further glance into the shining time to come. — *Western Railroad Gazette.*

A New Railroad Project.—The Cairo *Times* is strongly urging the building of a railroad between that place and St. Louis. Two routes for the line have been suggested —one passing by Bellville, Freeburg, Athens and Sparta, through the interior, half way between the Illinois Central Railroad and the Mississippi river; the other along the Mississippi, through the great American bottom, to Chester, and then below Chester through the hills through Jackson county to Cairo. The farmers of the American bottom, in St. Clair, Monroe and Randolph, would grade the road through their counties, if built along the river, so as to form a levee, and take stock to a considerable amount. There is wealth enough in the counties named to build the road almost without any foreign aid. The road would pay a fair per cent. at once. It would pass through one of the richest agricultural regions of Illinois, the finest coal fields this side of the Alleghanies, and an unrivalled fruit country. With the road completed, Cairo would become the head of navigation during the greatest part of the year.

## INTERESTING TO RAILWAY CORPORATIONS.

The recent terrible disasters occurring in the East have seemed to make a simultaneous and powerful impression upon the New York press. We find in the Post, the Herald, the Times and the Tribune, of the same date, editorials of great severity upon railway management; and the Tribune has a compilation of catastrophes for the past year, which fills over two columns of that sheet. The recapitulation of the horrid record shows the following causes of accident:

| | |
|---|---|
| Disasters due to collision | 23 |
| Rotton cross ties, broken rails, &c | 18 |
| Turning curves | 4 |
| Badly built and rotten bridges | 7 |
| Bursting of boilers | 3 |
| Defective locomotives | 2 |
| Absence of double track | 1 |
| Raised drawbridges | 1 |
| Landslide | 1 |
| Broken culvert | 1 |
| Absence or defect of light and signals | 2 |
| Running into horses, cows and derricks | 4 |
| Trifling with brakes | 1 |
| Tornado | 1 |
| Misplaced switches | 1 |
| Culpability of companies or employees, about | 45 |

The aggregate mortality and losses of trains are as follows:

| | |
|---|---|
| Passengers killed or mortally wounded | 300 |
| Passengers burned to death, about | 35 |
| Cases of injury in every form | 600 |
| Trains more or less demolished | 67 |

The aggregate amount of damage to the roads and the public from such disasters is estimated at $30,000,000 for this year.

It would appear from this statement that it is unprofitable for the companies to economize expenditures upon their tracks, rolling stock, and general management, though they probably cherish the hope that no serious accidents will occur, even if the necessary outlay be not made nor precaution taken.

About half of all the accidents for this year occurred on the Hudson River, the Erie, the Central, the Pennsylvania, the Baltimore & Ohio, the Harlem and the New Jersey Central roads. And yet these are the harvest roads of the continent, doing more business and making more money than any others. On glancing at the rapid increase of the earnings of these roads, the reader will pronounce it a most niggard parsimony that seeks to save money at such terrible cost of life and limb to those who entrust themselves to their care. We find that while the earnings of the Hudson River Road for the month of June, 1860, were but 129,996, for the same month in 1865 they were $310,049. The New York Central, in the month of May, 1860, earned $551,700; in the same month in 1865 it earned $1,204,435. The Erie Road, in the month of June, 1860, $393,409; in 1865, $1,225,528. The increase in the earnings of the Harlem for eleven months in one year was upward of a quarter of a million over those of the previous year.

Accidents have not been so numerous nor so appalling on our Western roads; though they are nearly all younger than the Eastern, and if they follow the penny wise and pound foolish policy of the East, a policy that values a few dollars profit at a higher rate than human life, they will come to the same depth of depravity and disgrace. The plea that their profits will not warrant all the expenditure that may be necessary to insure a reasonable degree of safety, will not be received by the reader after looking at the increase of earnings on our Western as well as on our Eastern roads. The Illinois Central, in the month of June, 1860, earned $188,060; same month, 1865, $590,061. The Chicago & Alton, in June, 1860, earned $76,426; same month, 1865, $343,985. The Michigan Central, in June, 1860, earned $123,085; 1865, $365,663. The Pittsburg, Fort Wayne & Chicago, in June, 1860, earned $165,795; same month, 1865, $650,311. The Toledo & Wabash, in June, 1860, earned $67,428; same month, 1865, $194,525. The increase on nearly all the Western roads has been in nearly the same proportion. The Housatonic road in December, 1860, earned $17,817; same month, 1864, $36,840. And we find that while the earnings of the Long Island road in 1855 were $301,793, for the year ending March, 1865, they were $666,850

Most of the roads have increased fares and freights enormously during the past two years —have gone far above the legal limit, and even to the point that will provoke public indignation, unless they manifest a disposition to insure all the safety possible to those who may travel. But we fear the richer these corporations become, the more indifferent they are to the public safety, and the more reckless of human life. It will not do in this country for corporations who have no souls, any more than for individuals who have souls, to increase their contempt for the people in proportion to the increase of their incomes. It will look far better and be far safer for them to preserve their humanity and moderation while growing rich, than to expend so largely upon splendid special trains for the managers and distinguished persons, and so meagerly for the safety of the common people.

Last winter, when the public was so frequently shocked by railway disasters, a simultaneous demand was made upon the managers and upon law makers for protection to the public. The plea was made that a large portion of the accident should be credited to the military control of the several lines during the war, and the immense amount of Government business they have been compelled to transact. The public seemed to be somewhat quieted by this excuse, and disposed to believe that the close of the war would insure the former security to travelers. Two or three months elapsed with comparatively few disasters, but recently the disorder has broken out anew, and it seems to have become epidemic. The old apology will not now avail. It remains for the companies to look after their own interest as well as that of the public in this behalf. There is, in this country, a power behind the throne greater than the throne itself. The power of even gold itself, can not successfully resist an aroused and an indignant people. We trust that our Western roads will jealously guard their own reputation.—*Cin. Gazette.*

## WEIGHTS AND MEASURES.

An uniform standard of weights and measures is what has been made on earth; and if we go to a *natural merit*, we have none, because all things on this globe are relatives. But, we can assume a standard of any one thing we choose, as the French did in assuming a degree on the Equator; by that we can regulate other things. The improvement suggested below, we think is a good one, because it simplifies things, and that is what we all want:

At the Detroit Commercial Convention, a committee was appointed to consider and report upon a uniform system of weights and measures. The New York Chamber of Commerce has also appointed a committee with the same object, and the attention of scientific men is just now much attracted to the subject. In connection with it we therefore publish an extract from a letter from A. K. Shepard, Esq., of Albany, which explains itself, and is well worthy of consideration.

"It would appear that the plan which would be most acceptable to the public, and meet with the least opposition, would be one which would merely simplify and modify existing standards.

The matter in which I am most interested is to induce the boards of trade throughout the country to adopt the cental of 100 lbs. as the standard for measuring all kinds of grain. We have now to the bushel of wheat 60 lbs.; corn, 56 lbs.; rye, 56 lbs.; oats, 32 lbs; and barley, 48 lbs.; when really the grain is bought and sold by the pound. A man buying 7,000 bushels of wheat, buys it with the understanding that 60 lbs. go to the bushel. If it were expressed 4,200,000 centals, it would save much useless labor. All grain is weighed at elevators, and the weights reduced to measure —an unnecessary trouble. If wheat is worth 129 cts. per bushel at Chicago, it would be much more simple to figure a boat load of 7,025 29-60 bushels, as 4,215.29 centals at 215 cts. per cental. The figures would all be in decimals, and all grain would be measured by the same standard. The business community are slow to move, but I think that proper exertion would bring about this much needed reform."

☞ The Baltimore & Ohio Railroad Company has fitted up four splendid steamers to ply between Baltimore and Liverpool. One of them will sail for the former city on the 15th of September. They are rated at 1,144 tons burthen. They are not at first making calculations upon "first-class traffic," but for the present confine their accommodations to the requirements of freight and immigration, for which the most ample provisions have been made. Twenty are the maximum number of cabin passengers to be allowed at first. It is the expectation of the company to put other vessels in the trade as rapidly as the exigencies of the traffic require. This, since the subsidence of the Collins and Vanderbilt line, will be the only American company running steamers over the ocean.

The capacity of the Baltimore & Ohio Railroad for doing the work before it, may be guessed, when we state that the company have in commission over three hundred locomotives and four thousand cars; and the speed with which the company has surmounted the misfortunes of the war offer a guaranty of ability for any enterprise it may undertake.

Cincinnati has a direct interest in the success of the new line of Baltimore and Liverpool steamers. The Queen of the West and the Monumental City are neighbors. Chesapeake Bay is the nearest ocean approach to our metropolis, and between them is already established a first-class railroad connection. A simple show of the figures will demonstrate the superior proximity of the two points. We present the several statements by the nearest routes, viz:

| | Miles. |
|---|---|
| Distance from Cincinnati to New York, by the Atlantic & Great Western and New York and Erie Railways | 863 |

Distance from Cincinnati to New York, by Steubenville, Pittsburg and the Atlantic Cut-Off..... 769
Distance from Cincinnati to Baltimore, by the Marietta & Cincinnati and Baltimore & Ohio Railways..... 585

Thus the last named route, from Cincinnati to the terminus of a good line of ocean steamers, is 278 miles, or 30 per cent., shorter than the usual route.—*Cin. Gazette.*

A NEW RAILROAD CONNECTION.—The North Missouri and Cedar Rapids Railroad Company is the name of a new corporation organized at Ottumwa, Iowa, for the purpose of constructing a railroad from Ottumwa to Cedar Rapids, a distance of seventy-five miles. Only twenty eight miles more will he required to complete this railroad to a junction with the North Missouri Railroad at the State line, and the latter road will soon be constructed to that point.

When this link is completed, it will make a continuous road from Dubuque to Keokuk, a distance of 225 miles. The track is now being laid between Marion and Cedar Rapids on the D. S W. R. R., and this road will be open from Dubuque to Cedar Rapids for passengers and freight, by the first of September next.

## MONETARY AND COMMERCIAL.

It is evident from what the daily papers report, that the fall pressnre for more means is beginning. Tbe calls at Bank are more frequent; the rates of interest to those not specially favored, a little bigher. Still tbere is no want of capital and currency; and probably will be none, till November and December, when the greatest activity in Western bnsiness takes place. It is one of the peculiar features of business in Cincinnati, that the greatest activity, botb in the business, and the money markets, takes place at the close of the year. For this, however, tbere is reason, in the fact, that the immense pork business concentrates, then; as well as a very large part of the grain transfers. Dealers generally make preparation for tbat period; but usually not enough to prevent a very active demand for money. *That* season, however, is two months off, and probably there will be no serious pressure for money till then. The following view of the money market is from tbe *Cincinnati Gazette.*

Au improved demand for money is reported by most of the banks, and the market is working rather closer. The interior banks are still drawing quite largely on tbeir deposits here, and as checking is heavy, currency balances are being gradually reduced. The supply of capital, however, is still ample to meet the legitimate demand, and rates of interest in the open market remain unchanged at 8@10 per cent. for unexceptionable names, and good mercantile bills. Outside paper is still scrutinized very closely, and holders find some difficulty in placing it at better than 12@15 per cent., the latter rate for temporary loans.

Gold has remained with very little variation, at what seems a *normal* rate, 144@144¼. Tbere is no unnsual demand for it in New York, and some speculation as to what keeps it up. The latest theory is that, the premium is about in *proportion* to the *excess* of currency. How is that to be ascertained? At any rate, it agrees very well with a tbeory of our own, tbat tbis country according to experience *needs* about *six hundred millions* of sound currency,—now really have at this time nearly $900,000,000. The premium of gold is 44; now, suppose we reduce the present bulk of currency in the ratio of 144 to 100, and we bave $635,000,000, which is precisely what we supposed necessary. If we now withdraw all tbe *compound interest notes*, which ought never to bave heen issued, our currency will be about what it ought to be.

There is no question, that tbe Government Notes, the Greenbacks, are the best, safest, and most convenient, that we have ever bad. For our own part, we hope they will be neither withdrawn or curtailled.

ELLIPTICAL BLAST FURNACES.—At tbe Dundyvan (Wales) Ironworks a furnace of this section, of 20 feet hy 12 fect diameter, and 60 feet in height, bas heen erected, which is stated to give extraordinary results.

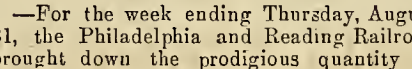
RED CHALK has been discovered in Kansas. Some workmen were excavating for a building at Leavenwortb, and struck a strata of tbis material.

—For the week ending Thursday, August 31, the Philadelphia and Reading Railroad brought down the prodigious quantity of 87,469 tons of coal.


Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

Indianapolis and Cincinnati



RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M. |
| Springfield and St Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10: 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawranceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harris n..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House. Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen.l Ticket Agt.

BENJ. H. LATROBE AND C. H. LATROBE,

CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also, the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

Atlantic & Great Western R'y.



TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:00 A. M. | 10:40 P. M. |
| HAMILTON..... | 9:57 " | 11:33 " |
| DAYTON..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:35 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All otber Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA.

Passengers to the Eastern Cities will find the

Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for all Trains.

Ample time is allowed, at all hours,

for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast cornor of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLARE Su
J. P. SARVER, } Passenger Agen
CHAS. COOK, }

# COUPON AND LOCAL TICKETS!

## CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

**CONSECUTIVELY NUMBERED**

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD.


## GOVERNMENT TRANSPORTATION.

GENERAL ORDERS No. 17.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., March 16, 1865.

1st. For the purpose of producing uniformity in the Transportation service and guarding against abuses, blank books of Transportation Orders will hereafter be issued from this office to the Chief Quartermaster of each Department, to be by him immediately furnished to each officer under his order entitled to issue the same; after the receip of which no other form will be used, unless in emergencies when the prescribed blank form cannot be had, and then the reason for not using it must be stated in the order.

These blank orders will be numbered and registered in this office in such manner that there will never be two orders of the same number in circulation; they will be charged to the Chief Quartermaster to whom sent, who will in like manner charge and hold responsible his subordinate officers.

On exchange of posts, or on transfer to another officer, like receipts must be taken and forwarded to the Chief Quartermaster of each Department.

2d. Within five days after the end of each month, a concise report will be made to the Department Quartermaster of the number of orders issued, the number cancelled by error (which must accompany the report), and the number remaining on hand, with a statement of the amount of transportation furnished in the month; which report in a condensed form (accompanied by the orders so cancelled) will be by him immediately transmitted to the Quartermaster General, under envelope, endorsed on margin "Rail and River Transportation."

3d. The marginal register should contain the substance of the order issued, and will be preserved by the officer issuing for his own protection, or return to the Department Quartermaster or this office, as may be hereafter required.

*Care should be taken at all times to keep on hand a sufficient supply of these blank orders*, which can be obtained upon application to the proper Senior or Department Quartermaster.

4th. Unless in extraordinary circumstances, all rail and river transportation, passenger and freight, at any post, will hereafter be under the control and management of a single officer, on whom requisitions will be made by other officers requiring transportation.

5th. When more than five persons, in one party, are to be transported over one road, or a continuous line of roads, separate orders for transportation must be issued for each road to be passed over. These orders should be received on the train instead of tickets, and are to be receipted by the party named in the order, and given up on the cars—the officers, or persons in charge, filling the receipt with the number actually carried. Five persons, or a less number, may be carried over a continuous line of roads upon a single order for transportation, and this order may be exchanged at the starting-point for tickets over the entire route.

6th. Settlement should not be made nor vouchers given to railroads on orders for passenger transportation properly belonging to other roads, but the *passenger* accounts for each road should be made up separately in the name of the roads to which they belong.

7th. Appletons' Railway Guide for January, 1865, will be used as a standard for indicating routes and fixing distances, unless the actual distance is proved to be less, in which case settlement will be made on the basis of actual distance. Where this Guide cannot be more readily procured it can be furnished from this office.

8th. When a number of troops are to be transported from any point to any other point, on the same day or train, it should be done in squads as far as practicable. A single transportation order, or set of orders, should be given to the ranking officer, or most responsible person of the several detachments.

9th. Blank books of Free Transportation Orders will also be furnished, to be used on boats belonging to, or in the service of, the Quartermaster's Department, or on railroads operated by the Government. The free passes in these books will be given to persons entitled to receive Government transportation, and should not be issued without designating on the order the boat or road on or over which the person is to be transported. The marginal registers in these books will also be preserved for return to the Department Quartermaster, or to this office, as may from time to time be required.

Should the route to be traveled be in part over roads or on those owned by private parties or companies, care should be taken that Free and Pay Orders are given as the case may require, or such requisitions furnished as will enable the party entitled to transportation to procure it at points where pay transportation commences.

10th. To warrant the granting of transportation, except in cases specified by Regulations or General Orders, published for general information, the person demanding the same should show a requisition or order from competent authority requiring the movement by public conveyance the performance of public duty.

The original requisition, when not necessarily required by the officer presenting it should be retained by the officer furnishing the transportation; in other cases, a certified copy or necessary extract from the order should be furnished to, and preserved by the officer granting transportation as his proper authority therefor, and a certified copy of the same must be endorsed on the back of the order.

11th. When the cost of transportation is to be reimbursed to the Government, as in the case of sick and furloughed soldiers, the required certificate should not only be made upon the furlough or order, but the transportation order should also be endorsed on the back substantially as follow: "The within transportation, furnished under General Order ——, and the proper officers duly notified. ——— A. Q. M."

12th. When transportation is granted to persons not in the military service, full explanations therefor should be given

13th. Orders for transportation should give the name of the party to be transported, or if there are several, then of the officer or person in charge, and state the number of men to be transported.

Orders for "one man," "ten men," and the like, without designating any name, are improper

14th. The receipts for transportation should be filled up in ink by the officer or person named in the order before signing, and if he cannot write his name, there should be a witness to his mark.

Names and places should be written distinctly in full, and not abbreviated.

15th. Duplicates of orders for passenger transportation should not be issued.

16th. When a requisition calls for transportation to any given point and return, the order should be issued to the place of destination, and the return transportation should be obtained at that point, provided it can there be procured.

17th. Upon the form of order now issued should be presented all the facts necessary to enable an auditing officer to decide as to the regularity or propriety of the order, so that it may be paid by any authorized disbursing officer.

18th. Erasures, interlineations, or alterations, if made against the interest of the Government, should be explained on the order by the issuing or other competent officer; otherwise, the transportation should only be settled for in accordance with the order before change or modification.

19th. Transportation by water being generally the cheapest should be selected when coosistent with the interests of the service. All transportation should be furnished by the shortest practicable route, unless a different route is indicated in the order which directs the movement. Where there are two or more competing routes without material difference in distance or time, the business should be divided in equitable proportion between them, the distance for which compensation is made being estimated by the shortest practicable route.

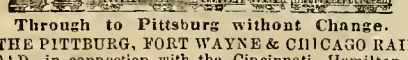
20th. In no case is subsistence furnished by the Quartermaster's Department.

21st. The good of the service requiring that railroads should obey the requisitions of officers properly authorized to demand transportation, in case compensation is made by the Government for illegal or unauthorized transportation so required, the officer making the requisition or issuing the order will be charged therewith, or if not paid by the Government, the railroad will be entitled to recourse upon such officer.

By order of the Quartermaster-General.

LEWIS B. PARSONS.
*Colonel, and Chief of Rail and River Transportation.*


## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport, produce and merchandise between Cinciunati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Ciucinnati.
J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

## Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Ciocinnati.....6:30 A. M., and 7:?0 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, suostantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

## *STEAMSHIP COMPANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS between NEW-YORK and HAVRE.

The first five splendid Vessels, inteoded to be put upon this favorite route for the Continent, are the following:

| | |
|---|---|
| WASHINGTON..... | 3,004 tuns, 900 horse-power. |
| LAFAYETTE..... | 3,004 tuns, 900 horse-power. |
| EUROPE..... | 3,254 tuns, 900 horse power. |
| FRANCE..... | (afloat), 900 horse power. |
| NAPOLEON III..... | (afloat), 11,00 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its exuivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

NATIONAL STEAM NAVIGATION COMPANY.
(LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building)..... | 3,412..... | ——— |
| ENGLAND (now building)..... | 3,430..... | ——— |
| SCOTLAND (now building) | 3,430..... | ——— |
| ERIN..... | 3,310..... | Grace. |
| HELVETIA..... | 3,315..... | Prowse. |
| PENNSYLVANIA..... | 2,872..... | Grogan. |
| VIRGINIA..... | 2,872..... | Lewis. |
| LOUISIANA..... | 2,166..... | Axplett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....at $100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to
WILLIAMS & GUION, No. 71 Wall street.
For steerage passage apply to
640* WILLIAMS & GUION, No. 29 Broadway.

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN..... | $90 00 | STEERAGE..... | $30 00 |
| First Cabin to London.. | 95 00 | Steerage to London.. | 34 00 |
| First Cabin to Paris.... | 105 00 | Steerage to Paris.... | 40 00 |
| First Cabin to Hamburg | 100 00 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR..... 2,595 65-95 tuns.
WISLIAM R, BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge.

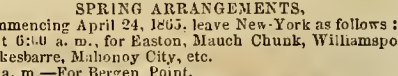
The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
640* JAMES A. RAYNOR, No. 10 Barclay street.

## CENTRAL RAILROAD
—OF—
## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Ciocinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:30 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scrantoo, Great Bend, Allentown, Reading, Harrisburg, Pittsburgb, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Manch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Eotrance on Twedty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:15; 4:39 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p, m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stoniogton Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

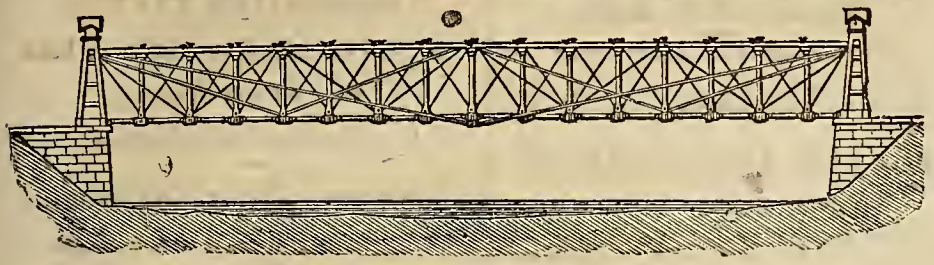
Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendeot.

NEW-YORK AN HARLEM RAILROAD Trains for Albany, roy and Saratoga Springs, als connecting with the North and West, leave Twenty-Sixth street Depot at 11a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York Brooklyn. Baggage checked from the residence points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

jan. 5, '61. 1y. Letter Box, 1393. C. J. SCHULTZ, Pittsburgh, Pa.

---

**HOLENSHADE, MORRIS & CO.**

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow, & all kinds of*

**SCREW BOLTS,**

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

**CINCINNATI.**

BRIDGE BOLTS, Rivets etc., Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27,1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

**M. W. BALDWIN & CO.**

**ENGINEERS,**

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines. 419 y

---

**KNOX & SHAIN,**

**Engineering and Telegraphic**

INSTRUMENT MAKERS,

PHILADELPHIA.

---

JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

**GOLD PENS,**

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

**FINDINGS**

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

**BUSH & LOBDELL,**

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

**CHILLED WHEELS**

—AND—

**TYRES,**

**FOR RAILROAD CARS**

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles,**

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

Manufacturers, Importers & Dealers

—IN—

**RAILROAD, CAR,**

—AND—

**MACHINE SHOP**

**SUPPLIES,**

—AND—

**MACHINERY OF EVERY DESCRIPSION**

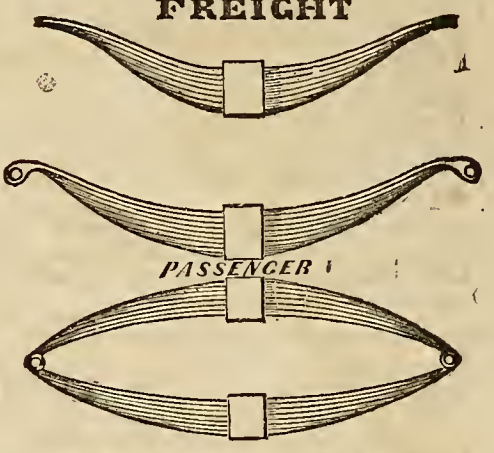
47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

RAILWAY SPRINGS.

**FREIGHT**




THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS,**

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledged himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

**Railroad Iron.**

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

51 Exchange Place, New York.

---

**W. M. F. HEWSON,**

**STOCK BROKER,**

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by w running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washingtnn City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore o the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M. leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Buses call for passengers.

## Change of Time.

SUNDAY, JUNE 19, 1865.

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph, Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent.

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago n advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtaine at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, C ncinnati Agent.

## MOSELEY'S

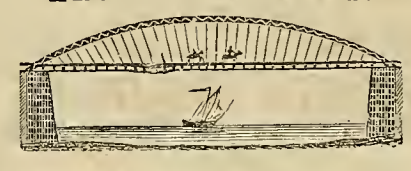
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2. MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Bailroad Machinery,

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Snp't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cn to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches for same. &c.,

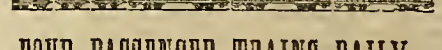
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East a Wes

WM. EARNS SUPT

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, SEPTEMBER 14, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

| *Little Miami—* | *Depart.* | *Arrive.* |
|---|---|---|
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| Morrow Accommodation | 5:20 P. M. | 7:45 A. M. |
| *Atlantic & Great Western—* | | |
| Morning Express | 9:40 A. M. | 7:20 A. M. |
| Night Express | 10:50 P. M. | 6:30 P. M |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A M, | 9:45 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Toledo, Detroit and Huntsville | 5:00 P. M. | 12:50 P. M |
| Richmond and Chicago | 6:00 P. M. | 12:25 A M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | | 7:55 A M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M. |
| Indianapolis & Cambridge City | 6:00 A M. | 10.05 P. M |
| " " " | 4:00 P. M. | 12:25 P. M |
| Eastern Night Express | 10:50 P. M. | 7:50 A. M. |
| Mail and Express | 9:40 A. M. | 6:30 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Springfield and St. Joe Express | 1:00 P M. | 5:07 P. M. |
| St. Louis and Chicago Express | 10:00 P M. | 5:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 5:15 P. M. | 8:20 A. M. |
| Harrison Accommodation | 9:30 A. M. | 8:40 P. M. |
| Chicago and St. Louis Express | 7:15 A. M. | 9:00 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 6:00 A. M. | 10:00 P M. |
| Connersville, Cambridge City & Indianapolis Express | 4:00 P. M. | 12:25 P. M. |
| *Ohio & Mississippi—* | | |
| St Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 7:45 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:12 P. M. |
| Evening Express | 2:35 P. M. | 6:00 A. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## FINANCES AND CURRENCY OF THE UNITED STATES—WHEN SHALL WE PAY THE DEBT?

The last report of the Secretary of the Treasury shows our finances to be in a much better condition than even the most sanguine anticipated. The truth is, this country is too rich, and its resources too great, in every way, to make a National Debt, however large, anything to be dreaded. The calculation of the increase of wealth and of our ability to pay a National Debt is very easily made. Supposing the war had actually arrested the growth of the nation from 1860 to 1865, (which is far from being the fact,) then on the return of peace in 1865, we start anew. Now, we know precisely the elements of future increase, both in population and wealth. Immigration is still rapidly going on, and industry is active; capital is increasing; commerce is quickened; in fine, we have all and more of the means and elements of increase than we had in 1860. Well, let us then begin in 1865, with the elements of 1860, and see what they will do by 1870, only five years. Thus:

| | |
|---|---|
| Population in 1860 | 31,443,322 |
| Wealth in 1860 | $16,149,616,000 |
| Annual increase of population | 6 55 per cent. |
| Annual increase of wealth | 12.64 " |

In the future, we take no note of the change produced by the abolition of slavery, because negroes, estimated by the standard of wealth, are no more than laborers, and their labors remain to increase wealth just as much when free as they did when slaves. Again, we shall not enter into the increase of wealth, at the rate set down from 1850 to 1860, because much of that increase was nominal, arising from the changes on the modes of valuation, by the several States. In fact, however, wealth does increase at a greater rate than population; for the obvious reason, that so much increase in population only gives so much increase in day's labor; while society has in fact, in addition to its labor, a vast force of machinery, arts, appliances, natural elements, &c., all at work. Hence, wealth in a country where there are plenty of new lands, and free institutions, does actually increase at a rate much more rapid than that of population. The census makes it four times as much, but for the reason given above, this is obviously too great. In order, however, to put the *rates* of increase at the *minimum*, we shall increase the annual *rate* of increase of population at 3 per cent., (which is less than it has been at any time since the foundation of the government,) and the rate of increase in wealth at 4 per cent., (only one-third of what the census gives,) and we have the population and wealth of 1870:

| | |
|---|---|
| Population in 1870 | 36,149,820 |
| Wealth of 1870 | $19,391,539,000 |
| Actual increase of population in five years | 4,716,498 |
| Increase of wealth in five years | $3,231,923 |

There is little doubt that the real results will be greater than these, because we have taken the *minimum* of rates. Assuming these, however, as true, let us see how the increase of these five years compares with our National Debt. The Secretary of the Treasury thus reports our Debt, and Interest, in round numbers:

| | |
|---|---|
| Debt, bearing interest | $2,382,788,294 |
| Debt, bearing no interest | 374,901,276 |
| Interest payable in gold | $64,500,590 |
| Interest payable in currency | 72,531.037 |
| Total amount of interest | $138,031,037 |
| Aggregate amount of debt | $2,757,689,571 |

Rate of interest on aggregate debt, 5 per cent.

Let us now notice the income of the country, which is now applicable to the Debt and interest:—1. The tariff duties received in the months of July and August were at the rate of $150,000,000 per annum, and the Internal Revenue, at the rate of $350,000,000 per annum. But, these smaller are much the largest of the Internal Revenue; but, taking into view the return of peace, and the improved state of the country, we believe that the domestic revenue will actually exceed $300,000,000. The aggregate revenue for July and August is, we see, at the rate of $500,000,000. Let us assume it at $400,000,000 average, during the next five years, and unless Congress makes great mistakes, the increase will be fully equal to that.

We can make a pretty correct estimate of the *expenses*, if we take a standing army of 100,000 men and a moderate navy, as the basis. The cost of these need not exceed $100,000,000 per annum, on an average.

With these elements before us, we can see at once what we can do.

1. *The increase of wealth in five years will exceed the entire National Debt, by nearly five hundred million dollars;* consequently, we could, if we chose, pay the whole debt in five years. But, that would not be convenient; and therefore.

2. Let us pay it out of our income. Then, we have this account:

| | |
|---|---|
| 1st year,—Expenses, | $100,000,000 |
| " Interest, | 138,000,000 |
| Total | $238,000,000 |
| Income, | $400,000,000 |
| Applicable to Debt, | $162,000,000 |

Now, apply $150,000,000 the first year,—$160,000,000 the second year, and so on, till we apply $200,000,000 per annum in 1870, which, be it observed, diminishes the interest $10,000,000 per annum. We shall have paid by 1870, no less than $870,000,000, having in round numbers, but $1,900,000,000 to pay after 1870. This will be paid at the rate of $200,000,000 per annum, and the entire National Debt will be paid off in 1880! In this, there is no mystery, and no doubt. Let the American people *will it*, and be patient, and EVERY DOLLAR OF OUR IMMENSE DEBT WILL BE PAID IN FIFTEEN YEARS! And then THE WEALTH OF THE NATION WILL BE DOUBLED. What people on earth were ever so rich—so great—so happy!

## ATLANTIC & GREAT WESTERN RAILWAY.

The distinguished and gentlemanly owners and representatives of owners of this great central and important line of railway, visited our city on Tuesday of this week, for the purpose of looking at the condition of the road in which they as well as we are so deeply interested. It was highly gratifying to our citizens to meet with these gentlemen, and exchange views that we trust will be productive of mutual good. The position of the Atlantic & Great Western Railway, in its present condition, is in some respects, perhaps, unfortunate. It has neither head nor tail, beginning nor end. It is true that they have borrowed the end of the Cincinnati, Hamilton & Dayton Railroad, enabling them to reach Cincinnati, which we doubt not will answer their purpose under the judicious management of the present able President of the road, Mr. L' Hommedieu, almost as well as if they were the real and exclusive owners of the route. But we plainly saw, and pointed out some time ago, that to make the Atlantic & Great Western as efficient as it should be, as a great competing line to the west, that they should own or control the Erie Railroad, and that the only way in which that could he done was for these gentlemen to buy up the majority of the stock of that road, and place the whole line from New York to Cincinnati under one harmonizing management. This idea, it seems, they have been pursuing, and are now about to carry into effect, and at the approaching election of the Erie road, we expect to see one President elected for the whole line. This is as it should be for the benefit of the whole property; and although other routes may have decided advantages in passing through nearly all the large cities between us and New York, while the Atlantic & Great Western touches at scarcely any, yet it passes through a rich country that has no other outlet, and will soon produce a local trade that will he highly remunnerative, if not so large as that enjoyed by other competing lines, while the great through trade must inevitably seek that route that is composed of the least complications, and on which there will be the best accommodation and the least delay. These are among the advantages that will result from the policy pointed out. Whether the adding of the Ohio & Mississippi Railroad to this magnificent line of railway will eventually prove an element of strength or not, some are inclined to doubt; but our opinion is that it will, and such appears to be the opinion of those gentlemen who are now most deeply interested. It is true that the Ohio & Mississippi will always have the competition of the river for the through business; but then it must also be borne in mind that in buying up the Ohio & Mississippi, the amount of capital invested will not be so great as that required in the absorption of the Erie, and although the income may be less, the return on the capital invested may be as great. Certainly no one is going to object, especially those who are forced to travel over it, to their taking the road and putting it in first-class order, and equipping and running it as a first-class road. We feel great confidence that these gentlemen will consent to no other policy, and we do not hesitate to say that we believe the result will be eminently satisfactory. We will further add that, for our part, as they are looking out as to the manner in which they may best promote the value of their investments already made, we will suggest that they continue their magnificent enterprise, and not stop at St. Louis, but merely make it their midway station between the Atlantic and the Pacific Oceans, keeping straight forward in a due south-west course, absorbing the South-west Branch of the Pacific Railroad, passing through Santa Fe, on down the valley of the Rio Grande, through Arizona to the Gulf of California. If it could be constructed in a straight line, it would be but a trifle longer than the road they will now control from New York to St. Louis, which is 1203 miles long, while from St. Louis to the Gulf in an air line will not vary much from 1450 miles. This at the first outset may appear to be an enormous undertaking. So it is; but Mr. McHenry said that he had spent $40,000,000 in these enterprises already, and that the gentlemen were willing to spend forty millions more, if they could see that it would pay. Double-tracking the entire route from New York to St. Louis would be a good thing, and is very desirable for the traffic of the road; but the extension of the road to the Pacific would be a "big thing;" and if they will expend the amount proposed by Mr. McHenry in this extension, they can rely on Congressional aid that will more than make up the balance of the fund necessary for construction, besides land grants that will eventually reimburse them for their entire outlay, especially if they will push forward the work with the same energy and enterprise that has marked their course from Salamanca on to Cincinnati. Then instead of having cause on the part of the Executive of the United States to congratulate the people on the grading and complete preparation of fifty miles of road bed in the course of a whole year, we would in five years have the entire road in operation. The ports on the Gulf, it is true, are not in our territory, but that is nothing. It is useless to resist "manifest destiny," for whenever we need them, no matter who is the nominal owner, they will be ours. The practicability of the route, its freedom from the engorging snows of winter, to which all others are subject, and its easier grades, are all too well known to need comment. If San Francisco could be moved to the point we indicate as the western terminus of the road, it would greatly add to the inducements for its construction to the point named. The harbors are, however, there, and another city would soon be built that would rival the Queen of the Pacific in its magnificence and grandeur, and that ten years start in the completion of the competing roads would do much towards accomplishing this result, no one will dispute.

Below we give the proceedings of the meeting at the Merchants' Exchange in this city, as reported by the *Gazette*. George F. Davis, President, on introducing the distinguished gentlemen, made the following remarks:

GENTLEMEN: I have the peculiar gratification to be able to introduce to you a delegation of gentlemen, who have crossed the ocean from old England, representing in a great degree the financial, political and social elements of Great Britain. These gentlemen are: Sir Morton Peto, Baronet, the Hon. Arthur Kinnaird, James McHenry, and others, and I take this formal means of introducing them to you; that they may associate with you, and become acquainted with our manner of doing business in the West.

They come to us to look into our country, to examine its resources; they see us not in a holiday suit, but in our houses of business, and I hope they will not look upon us from the stand-point of Great Britain; but remember that we are a new country and a new people. I am glad to meet them as merchants and men who have attained a high degree of social, political and financial credit; many of them possessing great names in the commercial world. They come to us at a period when we are just recovering from a tremendous struggle, after we have been purged of a disease which has been preying on our vitals. We welcome them. We are proud that they look upon us favorably. They see our country growing in greatness and in riches. They go to the West, where they will see undeveloped territory, full of latent wealth, produce to be evoked by capital.

We rejoice to meet them. They will associate with you, and you with them. You will have the advantage of intercourse with men of England, Scotland and Germany, and I believe in the advantages of such inter-communion. I believe that a merchant is not a mere trader, but a man in the highest sense of the word. I hope when these gentlemen leave this country, they will leave it after a prosperous journey and with pleasant recollections. Gentlemen of England, we welcome you to Cincinnati.

The Hon. Arthur Kinniard was introduced to the assembly, and remarked: My friend, Sir Morton Peto, will soon address you, but he requests me to say a few words to you to express the extreme gratification we have had ever since we landed in this great and glorious country. [Cheers] Personally, I had for many years longed for the opportunity of visiting this land. I have made its history my study, and I was glad to hear your President allude to the fact that we came in an auspicious moment, I was among those who in my country never doubted for a moment the success of the great war you had undertaken, and it is for me a proud day to express my gratification at the wonderful—for it is wonderful — result of such an enormous effort. For if it were so wonderful, the getting together of millions to fight the battles of the Union, it strikes me as still more wonderful the manner in which that army, who discharged their duties as well, I might say better in some respects, than the armies of any other country, have now been absorbed in

the population, returning to civil employments again. I repeat that this is wonderful, and will astonish the nations of Europe more even than the remarkable success of the struggle.

I congratulate you upon having a people once again engaged in those peaceful occupations so well represented in the city. I would not for the world not have visited the States of the West. I believe in a glorious future for America, and I believe the West is determined to play a great and powerful part in the States of the Union, and at no distant period occupy a prominent position in the policy of the country. I leave my friend, Sir Morton Peto, to deal with commercial matters. My impression, when I entered the great harbor of New York, was of gladness. I did not feel as a stranger, but as if I were in my own country, for are we not a people having one object in mind, peace and cordiality in our relations? Together we may defy all the Powers of Europe. We are one great Protestant people, with one heart and one feeling, and I believe that history will yet rejoice that two such nations are in all things united, and will carry their influence in religion, in art, in science, and commerce, to every part of the globe.

Sir Morton Peto, Baronet, M. P., was next introduced by the President, and, amidst loud cheers, he addressed the meeting as follows: Mr. President, citizens and merchants of Cincinnati—The object of our visit to this country, as you are all aware, is one purely of a commercial character. We, and our friends, have immense interests in your country; and when I say to you that, during the time of your great struggle, our friends have invested in your country, during these four eventful years, an amount equal to one-sixtieth part of your entire national debt, you will feel, as mercantile and commercial men, that this was one of the strongest demonstrations of confidence that could possibly be given in your future. [Cheers.] You all know that capitalists are proverbially timid. [Hear.] It is only when they feel the utmost amount of confidence in a people, and in their institutions, that you can obtain from them that which they feel to be a special object of their desires—their capital. [Cheers.] It is right I should say to you that it is mainly owing to the residence among us of a very eminent American merchant, my friend, Mr. James McHenry, that this result has been attained. [Hear, hear.] He came among us, he lived among us, he obtained our confidence. [Hear.] He showed us the vast resources of the West, and the result has been the construction of that magnificent work, the Atlantic & Great Western Railway. [Cheers.] We are here with him, and having had the pleasure now of passing over the road, and seeing the works of my friend, Mr. Kinnaird, [cheers,] we are here to say, in the broad light of day, that all the representations which Mr. McHenry had made to us in our own country, as to the resources of the road, have been very much less than he might have made, had he even then stated its full powers in the future. I tell you frankly, our object is to see for ourselves what more is to be done. [Cheers.] Being satisfied with our investment, we are anxious to look into our affairs, as prudent commercial men, to see with our own eyes how our money has gone; to see how it may be improved to further advantage; to see how, throughout the whole length, fresh sources of traffic may be opened, and how that which we have may be better accommodated. [Loud cheers.] I trust that all these results will be attained. Both myself and my friend, Mr. Kinnaird, have had the honor for many years of being members of the British House of Commons; and when we came here, though we came as commercial men, we came also as political men, with our eyes wide open. [Hear.] We have been from first to last your friends; and I am here to say, without reservation, and without the slightest fear of contradiction, with reference to the bulk of the people of Great Britain, that they were the attached friends of the North. [Loud cheers.] Let me also say to you that the result of that mighty and fearful struggle, doing away, as it has, with the blighting system of slavery, and opening the fair lands of the South to the full use of capital, and by giving you, I will say it without hesitation, a free, united and happy people, will give us more confidence, as mercantile and commercial, and even as political men, in your country than we have ever yet felt. [Loud cheers.] I do not hesitate to say that such a struggle as that through which you have just passed, the world has never before seen. [Hear.] The way in which it was supported and sustained; the way in which the North has shown and used its resources, and, let me say with my friend, Mr. Kinnaird, the way in which all those who have been partakers in the mighty strife of war have returned to the peaceful avocations of every day life, have astonished Europe even yet more than your wonderful success. Gentlemen, that our happy anticipations of the future may be realized in your case, I do say with regard to our country, is what we desire. We desire to see the cultivation of a hearty affection and warm friendship with you, based upon the only true ground upon which national friendship can ever exist, namely, the most perfect regard and respect for the institutions of each country. [Loud cheers.] You have your institutions, and you are justly proud of them. [Cheers.] You live happily under them. We are proud of our institutions, and we live happily under them. [Hear.] Difficulty ought not for a moment to throw any shadow of doubt over the relations of two such countries. On the contrary, the only way in which powerful nations can love and respect and regard each other, is by a total abnegation, of without for one moment entertaining the idea of interfering with each other's domestic affairs. [Cheers.] As I said the other day, upon another occasion, America is too just, too strong, and too independent, to be regarded, at the hands of Great Britain, or of any other nation, upon any other terms than those of respect, based upon a total and absolute understanding of our having nothing whatever to do with each other in regard to the management of your own domestic institutions. [Hear.] That is the policy of Great Britain; and wherever it has been carried out—and we believe it has been carried out freely and truly—there never can arise, with such a perfect understanding, any difficulty between the two people. Because, if we understand and cultivate each other, such difficulties can only be those which may be settled by calmly meeting, expressing your views, and interchanging your opinions. As is the conduct of affairs in mercantile life, so ought to be the conduct of affairs in political and national life. Such is now the policy of our country; such, I believe, is the policy of yours. Let Brother Jonathan and John Bull, who are good friends, be so forever; and then the civilization of the world and the promotion of liberty will from that time be assured, through their mutual friendships and regards. [Loud cheers.]

James McHenry was then called for, who said, after some complimentary allusions to European capitalists: I have built the Atlantic & Great Western Railway through the faith that these gentlemen had in my representations. My faith was based in part on the knowledge I had of Mr. S. S. L'Hommedieu, the President of the Hamilton & Dayton Railway, who was familiar with the resources of the west. He complimented Mr. Kinnaird, the engineer, and his executive aid, Mr. L'Hommedieu, and stated that their present journey westward was to see how far additional capital might be employed; and as they had already spent forty millions or more in this road, as much more could be found for future improvements, if it were needed.

Mr. Cossham was then introduced, and received with great enthusiasm. Nothing, said he, struck me more in your President's speech than that commerce has a higher mission than making money. I look upon commerce as one of the greatest means of civilzation in the world, and I am glad to see that its power in that regard is recognized in this city. I have frequently had occasion to express to my countrymen my deep feelings in regard to this struggle of yours, and I expressed them as strongly as you yourselves could. I knew that slavery must in the end be conquered by freedom, and I rejoice with you that the victory has so soon come, as I believe also that it is final. I believe that the South will be more blessed in the result than if they had been victors. I am gladdened at the prosperity of your country. I cannot think that we are altogether separated. We have one origin, have the same language and literature, ancestry and hopes. The Anglo-Saxon race is on the path of progress, and reaping the blessings of peace and the revolutions of their great industrial activity.

Mr. L'Hommedieu said: I am proud to be able to present to you such eminent gentlemen as we have here present. They come as friends and helpers. They will take our national or our railroad bonds, if we can spare any, and I suppose we can. They go West to see for themselves our inexhaustible prairies and our mineral regions. I trust they and you will remember their visit among us with pleasure.

The Hon. R. J. Walker then addressed the Chamber upon the importance of the State of Ohio and the Atlantic & Great Western Railway to the city of Cincinnati.

---

Exchanging Mails on the Railroad.—It has been in contemplation for some time past by the officials of the Post-Office Department to introduce in the mail service a system of exchanging mails on express trains while passing stations at full speed, thus obviating the necessity of stopping or slacking speed, excepting at such points as the managers may elect. The experiment has been tried on the Illinois Central Railway, and proved a complete success. The engine, with a car, to which was attached the apparatus, was run at various rates of speed; and in every instance the exchange was completely and satisfactorily made in the presence of a number of gentlemen. The mail pouch contained a weight of contents somewhat heavier than what is usually packed in a pouch for exchange; and it seems, from the facts demonstrated, that the utmost rapidity at which a train can run will not affect the operation of the apparatus, which is extremely simple, and not liable to get out of order at any time. This novel improvement, when fully introduced, will work great changes in the postal service all over the country, in which the railroad companies and public generally should have a great interest.

## STATISTICS IN WOOL.

The following view of the wool products of the United States in 1860 is from the United States census returns. Since then the product of wool has greatly increased.

WOOL.

*Pounds of wool produced in the United States in 1860.*

| STATES. | POUNDS. |
|---|---|
| Alabama | 775,117 |
| Arkansas | 402,382 |
| California | 2,683,109 |
| Connecticut | 335,896 |
| Delaware | 50,201 |
| Florida | 59,171 |
| Georgia | 946,227 |
| Illinois | 1,989,567 |
| Indiana | 2,552,318 |
| Iowa | 660,858 |
| Kansas | 24,746 |
| Kentucky | 2,329,105 |
| Louisiana | 290,847 |
| Maine | 1,495,060 |
| Maryland | 491,511 |
| Massachusetts | 377,267 |
| Michigan | 3,960,888 |
| Minnesota | 20,388 |
| Mississippi | 665,959 |
| Missouri | 2,069,778 |
| New Hampshire | 1,160,222 |
| New Jersey | 349,250 |
| New York | 9,454,474 |
| North Carolina | 883,473 |
| Ohio | 10,608,927 |
| Oregon | 219,012 |
| Pennsylvania | 4,752,522 |
| Rhode Island | 90,699 |
| South Carolina | 427,103 |
| Tennessee | 1,405,236 |
| Texas | 1,493,738 |
| Vermont | 1,118,950 |
| Virginia | 2,510,019 |
| Wisconsin | 1,011,933 |
| Total, States | 59,673,952 |
| TERRITORIES. | |
| District of Columbia | 100 |
| Dakota | ..... |
| Nebraska | 3,302 |
| Nevada | 330 |
| New Mexico | 492,645 |
| Utah | 74,765 |
| Washington | 19,819 |
| Total, Territories | 590,961 |
| Aggregate | 60,264,913 |

The total amount of wool raised in the States and Territories in 1850 was 52,516,959 pounds; in 1860, 60,361,913 pounds; and in 1840 was 35,802,114 pounds. In other words, the amount of wool increased from 1840 to 1850 about 16,750,000 pounds; and from 1850 to 1860, 7,750,000 pounds.

The following table shows the amount of wool produced in the New England States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| Connecticut | 335,866 | 497,454 |
| Maine | 1,495,060 | 1,364,034 |
| Massachusetts | 377,267 | 585,136 |
| New Hampshire | 1,160,222 | 1,108,476 |
| Rhode Island | 90,699 | 129,692 |
| Vermont | 3,118,950 | 3,400,717 |
| Total | 6,578,064 | 7,085,509 |

In 1850 there was over 7,000,006 pounds of wool produced in the New England States, and 6,500,000 pounds in 1860, showing a decrease of 500,000 pounds.

Vermont raised nearly half the wool produced in the New England States. From 1850 to 1860, however, the amount of wool produced in this State has fallen off more than 275,000 pounds.

Maine stands next, in the New England States, to Vermont, as a wool-growing State. In 1850 she produced 1,364,034 pounds of wool, and 1595,060 pounds in 1860, showing an increase of over 100,000 pounds.

New Hampshire stands third, and in this State, also, there is a slight increase from 1850 to 1860.

In Massachusetts, Connecticut, and Rhode Island, as well as in Vermont, the produce of wool has fallen off since 1850.

The following table shows the amount of wool raised in the middle States in 1860 as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| New York | 9,454,474 | 10,071,301 |
| New Jersey | 349,250 | 375,396 |
| Pennsylvania | 4,722,522 | 4,481,570 |
| Maryland | 491,511 | 477,438 |
| Delaware | 50,201 | 57,768 |
| District of Columbia | 100 | 525 |
| Total | 15,098,058 | 15,463,998 |

This is a falling off in the amount of wool produced in the middle States since 1850 of nearly 375,000 pounds.

New York produces about two thirds of the wool grown in the middle States. In 1850 she produced 10,071,301 pounds, and 9,454,474 pounds in 1860, or over 500,000 pounds less than in 1850.

Pennsylvania produced 4,486,570 pounds in 1850, and 4,752,522 pounds in 1860, or an increase of over 250,000 pounds.

The following table shows the amount of wool grown in the western States in 1860, as compared with 1850:

| | 1860. | 1850. |
|---|---|---|
| Ohio | 10,608,927 | 10,196,371 |
| Indiana | 2,552,318 | 2,610 286 |
| Michigan | 3,960,888 | 2,043,281 |
| Illinois | 1,989,567 | 2,150,113 |
| Wisconsin | 1,011,933 | 253,963 |
| Minnesota | 20,388 | 85 |
| Iowa | 660,858 | 273 898 |
| Missouri | 2,069,778 | 1,627,164 |
| Kentucky | 2,329,105 | 2,297,433 |
| Kansas | 24,746 | ..... |
| Nebraska | 3,302 | ..... |
| Total | 25,231,810 | 21,552,597 |

☞ Mr. Walker of Atlanta has been appointed Superintendent of the Macon and Western Railroad. The Montgomery and West Point Road was completed on the 13th ult.

☞ Col. Enos has been appointed Superintendent of the Nashville and Chattanooga Railroad by the company.

## RAILWAY "ACCIDENTS" AND THEIR CAUSES.

The discussion which is now carried on in reference to the railroads and their mountebank management, must certainly produce good. The time has come for the American press to take hold of this subject, and so centralize and intensify public opinion that a reform will be compelled. We have contributed our share of facts toward a proper understanding of the question, and propose to continue the investigation. We have heretofore confined ourselves to general criticisms on railway management; to-day we shall speak of those accidents resulting directly from the recklessness or carelessness of employees, such as collisions from trains out of time, or cars running off embankments into rivers or stone walls, and endeavoring, as well as may he, to point out some of those caused by improper construction of tracks and rolling-stock, and by neglect to keep the same in good working order. We often record railroad casualties, the cause of which is unmistakably apparent; but every now and then we see the announcement of one resulting from some "unccountable cause." A correspondent who is practically familiar with the whole subject, enables us to give a special illustration of our meaning. "Recently, (he says) while waiting at the depot of one of our important railroads, I happened to look at the wheels under some of the cars. In three trains which were then waiting to start, I saw four wheels unfit to be run, being very much broken on the outside of the hearing surface, or tread, so much as to he liable to drop into the openings at the angles of the frog-crossings, whenever the broken section of the wheel happened to revolve so as to come upon them; or to drop in between the rails at any place where the track was too wide, especially if the wheels were put on their axles to a narrow gauge, in regard to which there is not enough care taken. It is no uncommon thing to find wheels, which should be four feet eight inches apart, to be really only four feet seven inches apart. Not a week had elapsed when I saw a notice in one of our newspapers that one car passing over that very road had, from some 'unaccountable cause, been thrown from the track at a point where the rails were perfectly clear and in apparently good order. There can he little doubt that the one car thrown off had a broken wheel, which dropped in between the rails, while the rest of the cars, having good wheels, kept on, the track probably being also spread apart at that place."

A fact like this needs no comment. There is another matter, very trivial, apparently, which should never be neglected by railroad men, although it is rarely considered by the mountebanks who now control this science. We all know the influence of heat on iron. A 24-foot rail, for instance, is about one-fourth of an inch longer in the hottest days of Summer than in the coldest days of Winter, and, of course, when the track is laid in cold weather without leaving room enough between the joints of the rails to allow them to expand lengthwise in Summer, the whole track becomes too long, and will not lie in a straight line. We can readily deduce the effect. The force exerted was tremendous, and the whole track must be displaced sidewise. Sometimes, the whole superstructure is in this way moved several feet laterally from its proper position, and the rails are often spread apart from the same cause. This may be increased by the "crawling," as railroad men term it, or push-

ing of one rail against the end of the next, and so on to the third, induced by the traction of the driving wheels of the engines. A railway track in this condition is a source of constant danger. In addition to this, and equally dangerous, is the fact that the distance between the two tracks of double track railroads, and at sidings is almost without exception entirely too little.

However nice in theory it may be to see how close trains can go while passing each other and not strike together, it certainly makes very bad work when they do actually hit. Besides railroads carry logs, planks, scantling, and many other articles liable to be displaced by jolting, and to project so far beyond the open platform cars on which they are loaded as to strike other cars in passing them The reader of the table in yesterday's *Tribune* will see how common it is for cars to run close to bridges, buildings and fences, killing or maiming somebody every few days Out-houses and fences are often placed so close to the track that, should a board become loose and fall a little out of place, or the cars lean over a few inches, they must inevitably collide. No building should be allowed nearer the track than four feet; bridges should not be so narrow as almost to scrape the paint off the car windows, and tracks should never be laid nearer together than six feet.

The dangers of railroading are by no means inherent to the rapidity of locomotion, or the other results the science aims to achieve. It may seem miraculous, looking at a mad, roaring, whirling train as it passes, to suppose that it will reach any given point on this earth in safety. Yet we know from experience that it would be hard to throw the train off the track, provided that track is kept in good order The very weight and momentum of the train itself tend to keep the wheels down upon the rails, and to continue forward upon the same straight line, while the conical shape of the wheel flanges overcomes any slight inaccuracy at the points of the rails, if they should not be exactly in line. Those who manage railways are, however, apt to presume too much upon this, and allow things to go too long without repairing. Too much cannot be taken to have both track and rolling stock in complete order. Many valuable lives may be lost by the breaking of an axle. Even a defective spike may, by its giving way, precipitate a whole train off a curve, down a steep embankment into the water far below. A great deal depends upon the spikes, particularly upon curves of short radius, the whole momentum of the train in that case tending to push the rails outward with great force. Our correspondent illustrates this from his own experience. "I have seen," he says, "the leading pair of guide-wheels on a locomotive so placed that they constantly tended to run off the track on the left side. The flanges of the wheel on that side were worn bright, and comparatively sharp and straight, while the opposite wheel was about an inch from the side of its rail. In this case, the axles were not parallel. I also noticed, upon the main track of a railway, ties that were so much decayed that I lifted the spikes entirely out with my fingers, and as readily dropped them back again. I have often seen the ties so poorly bedded that, when trains were passing over them, each wheel as it rolled over caused them to vibrate perpendicularly two or three inches." The lesson this teaches is that all cross-ties should be sound and well bedded, so as to give a firm and solid track, without any irregularity on the surface.

Another point occurs to us of very great importance. The method of using layers of iron of different qualities, rolled into one mass, to form rails, can but tend to lessen their strength. The rail is not perfect; and the different kinds of iron constituting the different layers are differently affected by the severe shocks and strains to which they are hourly subjected. They laminate and otherwise deteriorate; the elongating influence of the heavily loaded wheels passing over them tends to detach the upper layer of iron from that upon which it adheres. The employment of steel instead of iron for making car-axles rails, and so on, would materially diminish the frequency of railroad accidents; broken axles and broken rails would be of very rare occurrence; and, in point of economy to the companies themselves, it would be desirable, as the increase of first cost (about twice that of iron) is more than compensated by the vast superiority in durability and strength Steel made by a peculiar process has been used to a limited extent, in various forms, upon railways in England and other parts of Europe. for several years past, always with great satisfaction; its great superiority over iron for such purposes being demonstrated, by actual trial, beyond all question. It is now getting to be more generally used there, and some of our American railroads have begun to experiment in the same way; their experience must give the same result. Particularly is it desirable to substitute steel axles for iron ones; and next, perhaps, in importance, to use steel instead of iron in making rails. What we mainly want, after all and above all, is care and shrewdness. There is no reason why railroading should not be as safe as carriage riding. If we play with steam, and tempt him, and disobey his laws, he becomes a demon, and will turn upon and rend us. If we study his character, master and control him, keep him in bonds, and hold him with a firm and prudent hand, he becomes a messenger of peace and plenty, and will follow our bidding over land and sea to the uttermost ends of the earth.—*N. Y. Tribune.*

---

Central Railroad and Banking Company of Georgia.—A correspondent of the *N. Y. Herald*, writing from Savannah, under date of August 31st, says:

One of the greatest events of the season occurred yesterday—the running of the first train for passengers over the Central Railroad. The road has been completed and put in good running order for a distance of forty-five miles out, to station Four-and a half To that point trains will now run regularly, leaving Savannah at half past six o'clock each morning. From there passengers will be taken through to Waynesboro, fifty-one miles by stages, and thence to Augusta by train, the whole trip from Augusta only occupying twenty hours. Many thousand bales of cotton hitherto awaiting transportation will now come at once to market. A correspondent informs me that for days wagons loaded with cotton have been arriving at Station No. 4. As soon as the road is completed through to Waynesboro, which is promised before November, the corporation will do an immense freight business.

The work on the Gulf road is being rapidly pushed. We have communication already with the lower portion, which is in running order, by steamers which run regularly between here and Doctortown. The completion of this road will give us direct daily communication with Georgia and with Florida.

The trade with Augusta even before the opening of the Central road had materially increasd, and is constantly improving.

## COST OF WORKING OIL WELLS.

A new work, says the *Stockholder*, entitled "The Oil Regions of Pennsylvania," by W. Wright, has just been published by the Harpers. It appears to have been prepared with much care and judgment, and presents much valuable information relating to oil operations. With regard to the cost of working the wells, and replacing them when exhausted, with new ones, the writer furnishes us with the following facts·

While I have estimated the actual receipts of Petrolia from the oil business only, at between thirty million and thirty-five million dollars a year, and those arising from the sale of crude oil at the wells, at twenty million five hundred thousand dollars, with a probable increase to nearly twenty-four million dollars, it will not do to reckon this as such a rate per cent. of dividend on so much capital invested. For, first, there must be deducted therefrom *working expenses;* and, second, an amount sufficing to constitute a *renewal fund*—that is, to replace the old well when it gives out by a new one equally productive. Thirdly, there is the government tax of one dollar per barrel. These matters have never been reduced to anything like a system; and I am well aware that, in attempting to discuss them here, I am rather opening questions than settling them. To arrive at accuracy in the matter, twelve months' examination of the country and the history of its wells would be requisite.

Of the whole number of works on my list, (three hundred and twelve,) only fifty-two are marked as flowing wells. I have not been sufficiently careful in every case to mark the distinction on my memorandum books, but am positive that the total of these "institutions" is under seventy, and believe it to be less than sixty.

Let us assume, then, the last as the actual number. This would leave, at the time of my visit, the number of pumping wells yielding oil at about two hundred and fifty. But to this should be added those undergoing repairs and those exhausting the water—at least one hundred in all, and making three hundred and fifty requiring fuel, repairs, and wages for attendance.

Here again, however, we confront "the law of lawlessness," a few of those wells running night and day, some seven days in the week, others using their own gas as fuel, several engines pumping two wells, while others perform their work in three or four hours per day. Taking these and other irregularities into account, it will be seen that, to arrive at an accurate estimate of average working expenses would involve no small amount of time and labor, to say nothing of the outlay. But an approximate estimate to each well of seven dollars per day for fuel, and fourteen dollars for superintendence, wages, and repairs, or one hundred and twenty-five dollars per week for each paying well, will not be found very wide of the mark. This sum, multiplied by three hundred and fifty, the number of pumping concerns, will give as the total working expenses, two million two hundred and seventy-five thousand dollars, to which should be added (say) two hundred and twenty-five thousand dollars for superintendence, wages, and repairs to the flowing wells, and making the aggregate outlays for operating expenses, *two millions and a half of dollars.*

The next item to be taken into account is wear and tear, or the replacing of exhausted wells, as they give out, by new ones. Here again a number of circumstances must be taken into account, not likely to be noticed by the uninitiated. In the first place, numbers of wells in operation are not paying their way, but kept going either with the expectation of finding purchasers, or that they may turn out better in time to come. Thus, the one which has been three years in operation, and is now producing only as many barrels of common oil daily, even if pumped every day from January to December, is unprofitable, and might better have been abandoned long ago. It will not do to put down three years as the period of its productiveness, but only that in which it actually earned a profit above working expenses.

The prevalent idea that wells can be "rejuvenated" or "resuscitated," so as to be nearly as good as new, is essentially a mistaken one. The Sherman, at one time flowing fifteen hundred barrels per day, has been resuscitated, by the blower, to the grade of fifty or sixty barrels. The blower and the pump have both failed to rejuvenate the Noble. The great Phillips is no longer Phillips drunk, but Phillips sober, pumping fifty barrels, instead of flowing nearly four thousand. How long even this may continue, is simply matter of conjecture. The best of wells, after deepening, reaming, and using every known appliance to force up the oil, have failed to become even second class concerns. Their sources of supply are manifestly rather the leakings and oozings out of thousands of little crevices in the subterranean world than the fountains which leaped upward so impetuously when first tapped.

From the best information accessible, I am led to estimate the average period of a good well's productiveness at eighteen months. In a majority of instances, the repairing and tinkering done after that date does not pay. In any case the purchaser should be careful not to accept the first day or two's yield thereafter as evidence of what it will be on the average. Now, to reach *one* productive source, with all the knowledge that has been gathered, it is necessary to put down *five* wells. Some persons say that one-fourth of those now sunk become profitable; but taking the entire oil region, I am within the mark in setting down the ratio at one in five. Now, assuming that machinery has only to be provided for the first, and that the depth will be five hundred feet, the cost of renewals will amount to twenty-five thousand dollars. This, multiplied by four hundred, the number of works already or prospectively yielding, would require an outlay, every eighteen months, of ten million dollars. I do not see how this heavy draw back can be safely reduced below *five million of dollars* per annum, which would imply renewal only once in two years. In point of fact, the newly invested capital in the oil region is used to replace the old works as they give out, much of the original capital having disappeared for ever, either as unearned dividends, or gone to the wrong side of the profit and loss account.

Lastly, we have the government tax of one dollar per barrel on crude petroleum. There is a short and easy method of arriving at the amount of that: If the yield for 1865 be three million five hundred thousand barrels, the excise duty will amount to precisely *three million and a half of dollars.*

We are now in a position to cast up the account, as follows:

| | | |
|---|---|---|
| Value of the crude oil at wells (say) | | $24,000,000 |
| Operating expenses | $2,560,000 | |
| Cost of replacing works | 7,000,000 | |
| Government excise | 1,500,000 | |
| | | 11,000,000 |
| Net profit (say) | | $13,000,000 |

This would pay seven per cent. per annum, on a *bona fide* capital of one hundred and eighty-five million seven hundred and fourteen thousand dollars.

## EXHAUSTION OF SOUTH CAROLINA.

The *Charleston News* estimates that of $15,000,000 bank stock, all is lost.

Of $5,000,000 bills in circulation, the market value is not more than twenty per cent. Of three insurance companies, neither can continue business. Of $20,000,000 in railroads, no dividends can be expected. Of five thousand houses in Charleston fifteen hundred have been burned, and others almost irreparably damaged. Of estates of decedents and minors, and of property in litigation, four-fifths are represented by confederate securities, and are therefore valueless. Of our many merchants, lately of large capital and unblemished credit, few have assets to pay the small debts against them at the beginning of the war. Of the many large and valuable estates in Beaufort district and the adjacent islands, all have been abandoned, and many have been sold for taxes. Of the large cotton estates, still further from the seaboard, many have been desolated. Of the cotton on hand at the beginning, and raised during the war, (amounting in value to at least $20,000,000,) the larger portion has been taken or destroyed. Of the stock, horses, hogs, cattle, farming implements, utensils, and furniture and silverware, all but an inconsiderable amount has been consumed, destroyed, or taken. Of the money in the hands of the citizens at the commencement of the war, or accruing from the sale of property, or the practice of professions, or the payment of debts, all has been invested in securities, of which nine tenths have no possible value. Of the debts uncollected, few are expected to be paid. Of the funds of churches, colleges, charitable institutions and societies, all also, or nearly all, have been sunk. Of the lands of the State not held by the Government, little has any market value. Into this frightful gulf of ruin has also been swept the value of four hundred thousand slaves, estimated a few years since at $200,000,000. And thus, therefore, of the $400,000,000 worth of property in the State in 1860, but little more than $50,000,000 now remains.

Considerable activity is manifested, and many of the old citizens have returned and reopened their former places of business, yet a long time must elapse before Charleston can be placed, in a business point of view, where it was before the war. The emancipation act not only destroyed the immense capital invested in slaves, but seriously damaged all branches of business by destroying the security of nearly every form of investment; bonds, mortgages, bank stock, individual notes—all were dependent, more or less, upon the cotton or rice crops of the "inevitable nigger." The State, indeed, resembles a vast wreck. Something valuable may be saved by time and labor; but, at present, it is a mere mass of broken spars and shattered timbers. At present, even the extent of the destruction is hardly realized.

## IRON MANUFACTURES.

The returns of the revenue for a definite period furnish, perhaps, better details of the extent of various branches of manufacture than the usual census. The revenue which is received from this department of industry is much greater than is generally supposed.

In the year ending June 30th, 1864, there was a tax paid on 276,192 tons of railroad iron, amounting to $295,064.

Putting the several classes in tabular form, iron was made in the following amounts, and yielded the following revenues:

| | TONS. | | TAX. |
|---|---|---|---|
| Railroad | 276,192 | paying | $295,064 |
| Sheet and Plate | 153,921 | paying | 242,513 |
| Bar and other rolled | 201,279 | paying | 279,932 |
| Castings | 172,585 | paying | 242,736 |
| Stoves and hollow ware | 82,325 | paying | 123,489 |
| Nails, spikes, etc. | 129,689 | paying | 291,173 |
| Total | 1,015,932 | | $1,474,907 |

This is exclusive of miscellaneous manufactures of iron and of marine engines, which paid three per cent.:

| | TOTAL VALUE. | | TAX. |
|---|---|---|---|
| Marine engines | $2,181,140 | paying | $65,434 |
| Miscellaneous manufactures | 63,035,390 | paying | 1,891,062 |
| Steel, and manufactures of | 12,151,500 | paying | 391,141 |

To obtain the value of all these manufactures of iron, a price must be put to the railroad and bar iron on which the tax was so much per ton. Railroad iron averaged $110 to $120 per ton; bar iron $130 to $135; sheet and plate $150 per ton. Part of the rails being re rolled, are put at but $50 per ton.

These values are estimated by the Philadelphia *Enquirer* nearly as follows:

| | |
|---|---|
| Railroad | $21,429,225 |
| Bar | 27,171,451 |
| Sheet and plate | 9,435,260 |
| Nails, spikes, etc. | 19,415,550 |
| Castings | 25,401,100 |
| Marine Engines | 2,181,140 |
| Steel and manufactures of | 12,151,500 |
| Miscellaneous iron manufactures | 63,035,390 |
| Total value iron and steel | $180,140,615 |

On this aggregate value the direct tax actually paid was $3,822,546 in that year. This is not all the revenue derived from iron, however. The amount of taxes paid indirectly as income tax, and the various taxes on coal and on all the adjuncts of manufacture, would at least double this sum of direct revenue. The labor and capital required to produce $180,000,000 in value of iron manufactures represent very large sums. The capital always exceeds the total production, and the cost of raw materials and of labor is nearly 40 per cent. each. So that the total values are nearly as follows, adding to the product a sum to represent the untaxed value of pig iron:

| | |
|---|---|
| Capital | $250,000,000 |
| Raw material | 75,000,000 |
| Labor | 75,000,000 |
| Product | 190,000,000 |
| Revenue | 10,000,000 |

Such was the iron manufacture of the United States in 1863–4, an interest of vast and vital importance in every way in which it can be regarded. It continued as large to the end of 1864, but for the current year, 1865, it is much reduced. Congress reduced the duty on railroad iron, and there has been a large amount imported in consequence. Taxes on labor and material enhanced the price to such a degree that nearly all the furnaces in Eastern Pennsylvania were forced to go out of blast. The rolling mills are half of them silenced, and the great machine-shops are far less pressed with orders than a year since.—*Stockholder.*

## THE CANNEL COAL FIELDS OF ELK RIVER, WEST VIRGINIA.

*To the Editors of the Enquirer:*

This river empties into the Great Kanawha at Charleston and is, next to that river, the largest in West Virginia. To Clay Court-house from its mouth is fifty miles. The fall in the river to that place is two feet per mile. The railroad chartered to connect with the Baltimore and Ohio Railroad, by way of Elk River, near Grafton, will he a grade of some three feet per mile, from Braxton Court-house to Charleston, some ninety miles, and connecting with the Ohio river by Big Sandy, bringing Baltimore nearer to Cincinnati by perhaps one hundred miles than by any other route.

Bituminous, splint, cannel coal and cannel slate abound in this river, in the upper part of Kanawha, and in the county of Clay. The cannel vein, however, here as elsewhere, presents the same eccentricity of deposit. Nine miles from Charleston, on Mill Creek, two oil factories are in operation. The one owned hy the Messrs. Tanton is worked with some fifty retorts, and I am credibly informed, at a net profit of $20,000 per annum, for the crude oil, these gentlemen selling their oil in the crude state. The other, on a large scale, is worked by a Boston Company, at a large profit. The next well defined cannel or oil-bearing coal is on Falling Rock Creek, nineteen miles from Charleston, where the most extensive oil works in America are about going into operation, owned hy a New York capitalist. The oil from these coals, and particularly the latter, is of a very superior quality.

The next cannelcoal vein is at Queen Shoal, twenty-five miles from Charleston, and is owned hy Mr. J. W. Rand, of Charleston. A company has been formed for the manufacture of oil here. The next well defined cannel or oil-hearing coal is at Clay Court-house, on hoth sides of the river. On the north side it is owned hy Mr. Jno S. Swann, Charleston; on the south side hy Mr. Wm. Edwards, New York. It is not, strictly speaking, cannel coal, neither is it a shoal. It yields a very superior oil and is extensive in deposit, being open for three miles on each side of the river. The yield of oil per bushel is from one and a half to two gallons. But it has, perhaps, ten per cent, less of tar than the coal oil known to me. The oil is remarkably pure and clear, has no sulphur, is fluid, and stands at 27° at a temperature of 60°. It is pronounced, recently, by judges of oil at Parkersburg, superior to any coal oil that has been produced, and being tested on a planing machine revolving 2,500 times to the minute, is also pronounced superior as a lubricator to any petroleum, out of a great many trials made at that place, and scarcely inferior to lard oil for such quick motion. Capitalists wishing to invest in cannel coal lands would do well to turn their attention to the oil bearing coal at Clay Court-house.

In addition to the cannel oil-bearing coal veins on Elk River, others doubtless exist, and will he developed, hut I am confining myself to those seen and examined. Several superior bituminous and splint coal veins have been also opened on the river, in the upper part of Kanawha and in the county of Clay. Among them is a six-foot vein, six miles helow Clay Court-house, a five-foot vein, three miles below, and a nine foot vein, one mile helow and half a mile above Clay Court-house. The first owned hy the heirs of David Piersan; the second, by Mr. S. Salsbury; the third is on the cannel coal lands at Clay Court-house. These three veins, known to exist from seven miles above to some fifteen miles helow Clay Court-house, are separated from each other hy from forty to sixty feet of sandstone, and are estimated hy judges equal in quality to any coal known in the West; besides those running, other veins are opened, and the same, no doubt, will he found lower down the river. The petroleum indications from Sandy Creek, thirty miles below, and for twenty five miles above Clay Court-house are numerous and distinct.

Among others, the river hubbles with gas to such an extent as to attract the most careless observer. The gas on the river, four miles below, and some distance above Clay Court-house, has heen known to take fire from fishermen's torches. Other surface indications are numerous. Iron ore can be seen along the river hluffs in many places.

The river affords cheap navigation for all purposes connected with the manufacture, transportation, &c., of oil for one hundred miles, hut for commercial coal it needs improvement, which could be made at a small cost.

VIATOR.

PARKERSBURG, Sept. 1, 1865.

## MINERAL INDUSTRY OF SPAIN.

The public are indebted to Mr. A. Piguet, C. E., of Madrid, for a series of elaborate and highly interesting statistics, showing the mineral production of the several provinces, the metallurgical production of the several provinces, the aggregate production of each mineral in all the provinces, the aggregate metallurgical and mineral manufactures in all the provinces, and the value of the products obtained in the mines and works carried on hy the Government. The total value of the mineral productions for the year was 163,199,937-51 reals, produced in the following proportions:

| *Ore.* | *Yield in qntls.* | *Value per qntls.* | *Total value in reals.* |
|---|---|---|---|
| Iron | 2,134,921 | 3:25 | 6,928,743:20 |
| Lead | 2,778,400 | 30:43 | 84,546,233:50 |
| Silver | 25,237 | 245:00 | 6,193,435:06 |
| Copper | 2,277 1-2 | 8:03 | 20 563,043:70 |
| Tin | 1,013 | 220:00 | 222,860:00 |
| Zinc | 411 042 | 26:00 | 10,687,092:00 |
| Mercury | 161,153 | 57:00 | 9,185,721:05 |
| Cobalt | 27 | 172:00 | 4 044:00 |
| Antimony | 847 | 50:00 | 42,350:00 |
| Manganese | 64,598 | 15:00 | 868,970:00 |
| Soda | 50,117 | 5:00 | 251,085:00 |
| Alum | 81 423 | 4:00 | 325,692:00 |
| Sulphur | 126,395 | 16:00 | 2,022,320:00 |
| Asphalte | 11,061 | 13:00 | 151,593:00 |
| Topazes | 55 | 1695:00 | 9,322:50 |
| Coal | 3,602,450 | 5:05 | 19,81 .508:00 |
| Lignite | 286,961 | 4:05 | 1,291,324:50 |

From these the metallurgic and mineralogical products obtained were of the value of 243,555 090:80 reals, making a total of 362,-109,847:80 reals. The proportions of the several materials were:

| | *Yield in qntls.* | *Value per qntl.* | *Total value in reals.* |
|---|---|---|---|
| Pig-iron | 481,062:00 | 60 | 28,863,720:00 |
| Wrought-iron | 410,583:09 | 170 | 68,816,110:30 |
| Steel | 1,621:80 | 260 | 421,460.00 |
| Lead | 627,679:00 | 140 | 87,875,0 0:00 |
| Silver | 13 759:54* | 820* | 11,282,822:80 |
| Gold | 7,660:00† | 13† | 99,580:00 |
| Copper | 28,898:00 | 780 | 22,540,44 :00 |
| Tin | 51:00 | 1630 | 88.130:00 |
| Zinc | 18,834:00 | 170 | 3,201,780:00 |
| Mercury | 7,395:69 | 1876 | 14,435 820:00 |
| Soda | 28,050:00 | 60 | 1,6-3,000:00 |
| Alum | 2,252:00 | 80 | 180,169:00 |
| Sulphur | 24.444:00 | 122 | 2,982 168:00 |
| Asphalte | 2,246:00 | 40 | 89,840:00 |

* Killogrammes. † Grammes.

The returns for the provinces of Huesca and Teruel have not been received; the return of zinc for the province of Alhaceta is likewise wanting. The prices given are tho average prices ruling during that period,

The value of the products obtained from the mines and industrial works belonging to the Government during the year 1862, which is the last year for which the statistics have been published, and that to which the whole of the particulars given above relate:

| *Name of Works.* | *Where Situated.* | *Ore Produced.* | *Products in Quintals.* | *Product obtained in Quintals.* | *Value in reals.* |
|---|---|---|---|---|---|
| Almaden | Cuidad Real | Cinnabar | 113,260 | Mercury, 7,401 | 13,884 2:6:00 |
| Rio Tinto | Huelva | Cop. pyrites | 861,945 | Copper, 13,113 | 10,178,744:10 |
| Linares | Jaen | Galena | 33 573 | Lead, 25,769 | 3,752,810:51 |
| Hellin | Albacete | Sulphur | ..... | Sulphur, 2 058 | 479,734:36 |
| Various | Various | Salt | 1,350,586 | Salt, 1,892,0.5 | 118,554,737:00 |

Mr. Piguet's tables, showing the mineral and metallurgical productions of each province, are prepared with extreme care and are very elaborate, but, notwithstanding the large amount of information they contain, the comparatively limited space at our disposal prevents our publishing them.—*London Mining Journal.*

RAILROADS IN SOUTH CAROLINA.—A correspondent of the *Herald* writing from Hilton Head, S. C., August 25th, says that Hilton Head will soon lose its commercial importance, unless one of the several railroad schemes now under consideration, is carried out. There are two principal projects—one for a road from St Helena, on the opposite side of the harbor, to connect with the Savannah and Charleston road, which would make Hilton Head a sort of suburb of the new city; and the other for a road from this island across Skull creek, and the Savannah and Charleston road, to the Georgia Central road. Both parties are laboring for the roads in which they are respectively interested very earnestly. Joseph H Sears. Esq., of the *New South*—one of the oldest and most prominent citizens—is one of the principal workers for the Hilton Head line, and is confident of success. It is estimated that $400,000 will be all the capital required and claimed; that investments will soon prove of almost unprecedented profit. Whether either road is built remains yet to he seen.

☞ E. B. Phillips, the Superintendent of the Boston and Worcester Railroad, has resigned his position to accept the Presidency of the Michigan Southern and Northern Indiana railroad company.

## MONETARY AND COMMERCIAL.

In spite of all attempts to show that we have too much paper money, that there is great danger of bubble operations, that there will be a sudden let down, notwithstanding all attempts to depreciate the currency and business of the country, the simple *fact* is, that the business, and money, and finances of the country are going on well and harmoniously. There are a great many people engineering their wits on the proposition that the Government shall suddenly withdraw a large part of its currency, and thus produce a commotion and bring a chill on business. Now, there are several means why this will never happen, 1st, the Government will never withdraw its currency suddenly; 2d, it will never withdraw the larger part of the legal tenders; and 3dly, the country wants, and will have, nearly as much currency as there is out. Whoever thinks upon the subject will see that this statement is correct. In the first place, the Government can *not* withdraw its currency immediately; although it may probably not need to borrow much more, yet it is certain to be pressed for money for a year or two to come. No sudden contraction of the currency *can* take place. In the next place the Government will never take in a large part of its legal tenders; for they bear no interest, while the bonds do bear interest; and therefore the bonds will be paid first; and, lastly, the people *need the legal tenders*, and much prefer to have them out.

But, again, persons who talk about the paper currency are generally much mistaken in the amount. We just saw a mercantile paper which said there was a *thousand millions of paper circulation.* This is a mistake. There is no such thing. Let us examine it. The following is the statement of the circulation by the Secretary of the Treasury, on the first of September:

| | |
|---|---|
| United States Notes | $433,168,569 |
| Five per cent. notes | 33,954,230 |
| Compound interest notes | 217,024,160 |
| National bank notes | 177,000,000 |
| | $861,146,959 |

Now, there is very little bank circulation besides this. Perhaps there may be enough to make the circulation $900,000,000. But it is not true that this is all a circulation. Much the largest part of all the interest bearing notes are held up by banks and capitalists. The Government holds an average of $40,000,000 in these notes. Thus there are $250,000,000 of these issues not in general use at all. When we come down to matter of fact, we find there are only, altogether, $650,000,000. How much of this can be withdrawn without a commercial convulsion, we do not know; but, in our opinion, very little of it can be withdrawn with safety. After taking into view all the growth, commerce, extension and products of this nation, we do not believe it can get along with less then *six hundred millions of currency;* and we don't believe there is likely to be less in a number of years. The activity and extension of business is, therefore, likely to continue for a long time to come.

## THE UNDERGROUND RAILWAY IN LONDON.

Having almost daily occasion to use the Underground Railway in going to and coming from the city, I can not help pointing out its great advantages. It is the best means of relieving the over crowded streets, as thousands of people avail themselves of this great institution to reach any end or place of London, in a very comfortable and cheap way, and in a comparatively short space of time. The trains leave every five or ten minutes, according to circumstances, and stop at the intermediate stations just long enough to set down and take up passengers, making a distance—say, for instance, the Battery to Union Square—in about ten minutes. They ran first, second, and third class carriages well fitted up, and lit with gas, thus enabling passengers to read newspapers, etc. They use fine strong locomotives, consuming their own smoke, thus keeping the air in the long tunnels perfectly clear and healthy. Their speed between the stations is very fast. The traffic is enormously great, and makes me think how well such a road would answer in New York under Broadway, from the Battery to Central Park. Think how fine it would be to reach Central Park in about half an hour's time, or the Park, (City Hall,) Canal, Houston, or 14th Streets in far less time, without being obliged to ride in over crowded omnibuses or cars, over badly paved or muddy streets; as one is always sure of a comfortable seat, and a good light to stand by. The moneyed men ought to build such a road, for it would pay them well in the end, as experience here shows, and they are contemplating new roads here in every direction, and in connection with all the railway stations.—*Cor. Journ. of Commerce.*


Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10: 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawranceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city. ROBT. MEEK, Superintendent.
T. B. LORD, Gen.l Ticket Agt.

BENJ. H. LATROBE AND C. H. LATROBE,

CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI | 9:00 A. M. | 10 40 P. M. |
| HAMILTON | 9:57 " | 11:43 " |
| DAYTON | 11:30 " | 12:55 A. M. |
| SPRINGFIELD | 12:35 " | 1:45 " |
| URBANA | 1:40 P. M. | 2:15 " |
| GALLION | 5:35 " | 6:10 " |
| MANSFIELD | 6:50 " | 7:15 " |
| AKRON | 9:30 " | 10:00 " |
| RAVENNA | 10:05 " | 0:40 " |
| LEAVITTSBURG | 11:00 " | 11:10 " |
| GREENVILLE | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE | 1:20 " | 2:30 " |
| CORRY | 2:45 " | 3:55 " |
| Arrives SALAMANCA | 4:58 " | 2:55 " |
| NEW YORK | 10:30 P. M. | 1:00 " |
| BOSTON | 2:30 " | 8:00 A. M. |
| PITTSBURGH | 2:20 A. M. | 3:20 P. M |
| HARRISBURG | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA | 5:35 " | 6:55 " |
| BALTIMORE | 5:45 " | 7:00 " |
| WASHINGTON CITY | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for all Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

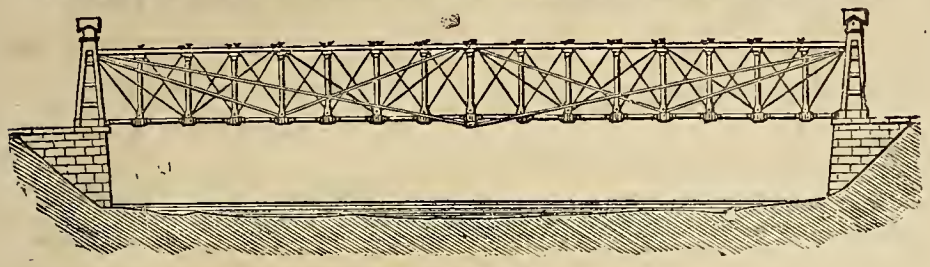
CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLARE S
J. P. SARVER, } Passenger Agen
CHAS. COOK, }

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '63. 1y. Letter Box, 1392. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS O ,

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets - ITS, ach Screws, and Thresher Teeth, made on short notice Ad on the most favorable terms Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers. and those nterested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done By these means the maximum useful effect of the power is secured with the least expense for attendance. cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*. they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y 1

---

## KNOX & SHAIN,
## Engineering and Telegraphic

INSTRUMENT MAKERS,

**PHILADELPHIA.**

---

## JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4. 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

**Either Single or Double Plate,**

**With or Without Axles.**

## WHEELS FITTED

**To Hammered or Rolled Axles.**

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

## Manufacturers, Importers & Dealers

—IN—

**RAILROAD, CAR,**

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

**MACHINERY OF EVERY DESCRIPSION**

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

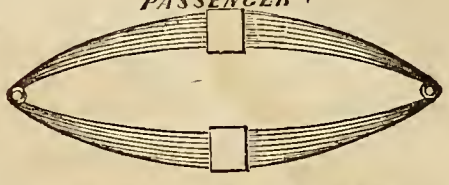
## RAILWAY SPRINGS.

**FREIGHT**





*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL. he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned. agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,
## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock. Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by w running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT.

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more of the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently char. ged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can pro cure *through tickets and through checks to* WASHING. TON CITY.

W. P. SMITH. *Master Transportation. Baltimor*
J H. SULLIVAN, *Gen. Wes Ag't. Bellaire, O.*
L M COLE, *Gen. Ticket Agent. Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday nigbt, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; B r net House Office, corner Vine and Baker streets, and at the spective depots, East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Buses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph, Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent.

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis. at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train. and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD. President.
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

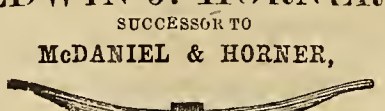
Spt. 2 MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cn to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches for same. &c.,

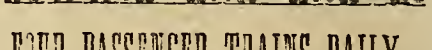
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M night.

On Sundays, 4.30 A M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East a Wes

WM. EARNS Supt

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, SEPTEMBER 21, 1865.

THE RAILROAD RECORD,
*PUBLISHED EVERY THURSDAY MORNING,*
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.



ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

| *Little Miami—* | *Depart.* | *Arrive.* |
|---|---|---|
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M | 10:05 A. M. |
| Morrow Accommodation | 5:20 P M. | 7:45 A. M. |
| *Atlantic & Great Western—* | | |
| Morning Express | 9:40 A. M. | 7:20 A. M. |
| Night Express | 10:50 P. M. | 6:30 P. M |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Toledo, Detroit and Huntsville | 5:00 P. M. | 12:50 P. M |
| Richmond and Chicago | 6:00 P. M. | 12:25 A. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | | 7:55 A. M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M. |
| Indianapolis & Cambridge City | 6:00 A M. | 10:05 P. M. |
| " " " | 4:00 P. M. | 12:25 P. M. |
| Eastern Night Express | 10:50 P. M. | 7:50 A. M |
| Mail and Express | 9:40 A. M. | 6:30 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Springfield and St Joe Express | 1:00 P. M. | 5:07 P. M. |
| St. Louis and Chicago Express | 10:00 P M. | 5:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 5:15 P. M. | 8:20 A. M. |
| Harrison Accommodation | 9:30 A. M. | 8:40 P. M. |
| Chicago and St. Louis Express | 7:15 A. M. | 9:00 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 6:00 A. M. | 10:00 P M. |
| Connersville, Cambridge City & Indianapolis Express | 4:00 P. M. | 12:25 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4:00 P. M. | 7:45 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:12 P. M. |
| Evening Express | 2:35 P. M. | 6:07 A. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## CITIES AND RAILROADS; RIVALS FOR THE TRADE OF THE WEST.

Notwithstanding the great number of navigable rivers in the United States, its great lakes, and the immense extent of its coast; yet, the artificial navigation,—canals and railroads, are the most important to the internal trade. Again, as between canals and railroads, the latter are the most important; so that, when we come to look into the whole commerce and navigation of this vast country, we find railroads continually growing greater and greater, and of more and more interest. Indeed, there is nothing more wonderful in the progress of the arts, than the American railroad system. We have now in round numbers 34,000 miles of such roads in operation, and their average cost is not less than $40,000 per mile, making a capital in railroads alone, exceeding *one thousand three hundred millions of dollars!* When we come to consider that this is a capital invested in mere *means of locomotion*, independent of the *productive industry of the country*, we are astounded! What must that industry and that trade be, which can afford to pay so much for the mere machinery of transportation? If we look a little farther, we find that, while there is a great deal of manufacturing and an immense commerce in New England and New York, and a great deal of coal mining in Pennsylvania, the great productive agricultural bond of all commerce and manufactures lies in the West; and that each year adds to the growth and produce of the great Western granary. The great cities of the Atlantic are growing by virtue mainly of the Western trade. They serve as depots for both agricultural and manufacturing produce, and the *distribution* of both to the consumers in both America and Europe. Hence, these cities grow rapidly, and must continue to grow with the growth of the producers, and the extension of the interior lines of transport. Let us take a glance at the Atlantic cities and their connections with the West.

The growth of the four great Atlantic cities, for twenty years, were as follows:

| | 1840. | 1850. | 1860. |
|---|---|---|---|
| Boston | 93,383 | 136,881 | 177,812 |
| New York | 312,710 | 515,547 | 805,661 |
| Philadelphia | 220,423 | 340,045 | 562,529 |
| Baltimore | 102,313 | 169,054 | 212,418 |
| Aggregates | 728,829 | 1,161,527 | 1,758,220 |

Here, we observe that the relative increase was, for twenty years,

| | |
|---|---|
| Boston | 90 per cent. |
| New York | 160 " |
| Philadelphia | 154 " |
| Baltimore | 106 " |

Even the smallest of these ratios shows a very rapid growth, and what is very remarkable, the growth does not diminish with the advance in numbers. Nothing shows the influence of railroads on the growth of cities more than this fact. It is the long arms of railroads reaching from these cities to the far interior West, which has not only kept up their growth, but increased their ratios of growth. The lines which connect these cities with the West, are:

| | |
|---|---|
| Boston *via* St. Albans to Ogdensburg—thence Lake Ontario | 393 miles. |
| Boston to Troy—thence N.Y. Central | 200 " |
| New York *via* Hudson River, and N. Y. Central | 450 " |
| New York *via* N. Y. Central and Allentown, to Harrisburg, Pa | 182 " |
| Philadelphia *via* the Central and Fort Wayne to Chicago | 824 " |
| Baltimore *via* Baltimore & Ohio R.R., and Marietta to Cincinnati, | 586 " |

We have only pointed out the lines till they come to points diverging through the West. If we take any common point in the Central West, such as Cincinnati, St. Louis, or Kansas City, we see at once, that the lines by Boston and New York are the longest, and those by Baltimore are the shortest. If we consider also, that Baltimore has increased in the last twenty years 106 per cent.; that she is now relieved from the incubus of slavery, and that she is much the nearest city on tide-water, we can not resist the conclusion that *relatively* Baltimore will probably increase the most rapidly in the future, and is likely to become in another generation one of the most magnificent cities on the continent. Having 212,000 inhabitants in 1860, it will probably have 450,000 in 1880. The recent State census of New York shows that city to have fewer inhabitants *apparently*, than in 1860; but, it is most probable, that the census of 1860 was entirely erroneous. The census-takers compensated by *the name*, and when that is the case, they will always find an extraordinary number of persons. It will be observed also, that each of these cities has some advantages peculiar to itself. Thus Boston must always enjoy the largest share of the Canada trade, and that will be very large; and with that, of the manufactures of New England.

New York commands the trade of the lakes and will always do so; and the lake Border is very large, and is fast being surrounded with flourishing towns. It will also by the Erie, and Great Western, command a very great interior trade.

Philadelphia has advantages over either of them, in regard to strictly *interior* commerce; and to this must be added the immense products of her coal mines. The advantages conferred by these may be known by the receipts of the Pennsylvania Central Road, which this year will amount to no less than *fifteen millions!* The advantage of Baltimore is what we have mentioned, the all important fact, that she is nearer than any city on tide-water to the great grain fields of the West.

What is said in regard to the growth of Atlantic cities is still more true of Western cities, some of which will soon rival New York and Philadelphia. Indeed, the growth of

*towns* in this country is one of the most remarkable features of the general growth.

We add here the following table and remarks of Mr. Kennedy on the Census Compendium:

The average increase in the population of the cities above enumerated is 78.62 per cent; the increase of the whole population of the United States during the same period (as is shown in another table) is 35 59 per cent.

The average decrease of the ten cities in the table, whose population has diminished since the returns of the census of 1850, is 14.66 per cent.

INCREASE OF POPULATION.

| Cities. | From 1840 to 1850. | From 1850 to 1860. |
|---|---|---|
| | *Per cent.* | *Per cent.* |
| New York | 64 86 | 56.27 |
| Philadelphia* | 54 27 | 65.43 |
| Boston | 19.68 | 29.90 |
| Baltimore | 65.23 | 25.65 |
| Cincinnati | 149.11 | 39 51 |
| St. Louis | 372.26 | 106.49 |
| New Orleans | 13.87 | 44.94 |
| Chicago | 570 31 | 264.65 |

* The bounds of Philadelphia were extended in the year 1854 so as to embrace the entire county, which accounts, to some extent for the great and unusual increase of population during the last decade.

## RESPONSIBILITY OF LOCOMOTIVE ENGINEERS.

The following letter is from *Fincher's Trades' Review:*

"SIR:—Who is responsible for the safety of the train and lives of passengers while in motion? Who is the first on the train that sees danger? Most emphatically, it is the engineer; and, as a general thing, he alone is held responsible for the accidents that occur. Then, when such a weight of responsibility rests upon him, should he not have all possible power in his hands of stopping the train? Then there should not be a passenger train allowed to run without brakes that the engineer can control. Suppose a train is moving at the rate of thirty miles per hour; the engineer discovers a switch misplaced, or an obstruction of some kind on the track, he gives the signal 'down brakes;' in nine cases out of ten the brakemen are inside the cars, and by the time they reach their stations and get the brakes set, the distance is nearly used up, and an accident is inevitable, while an immediate application of the brakes by the engineer would have saved this. I believe it is the duty of railroad companies to give the engineer control of the brakes. But here is another consideration: his labor and responsibility is increased, and in consequence his pay should advance. I believe that wages should always be in proportion to the labor performed, and the danger incurred in performing it. Then if the engineer performs his duty as well as the brakemen, and by so doing renders life and property more safe (which I believe can not be doubted,) he should be paid accordingly, and railroad companies by adopting this plan would save money. The stock that engineers could avoid killing by having control of the brakes (not speaking of the danger of being thrown off the track), would be no small item, especially in the Western country, where so few roads are fenced. S. T. CONKLIN, *Engineer.*

"Richmond, Ind. July 19, 1865."

## STOCK GAMBLING.

It is a very curious fact that by various manipulations, and perhaps from various causes, stocks that were of a merely nominal value have sometimes reached a fabulous price. That the increased price, in some instances, was legitimate is true, being based on increased earnings and income, while in many instances it has been the result exclusively of stock operations in the hands of master spirits. It is also true that nearly all the departments of commerce, manufactures, and property has experienced a wonderful increase in values since the beginning of the war, and there is no reason why there should not be at least a corresponding increase in the value of railroad securities. In some instances this is however so very great that it can not be accounted for on this hypothesis. We give below the lowest figure at which the stock of a number of leading roads has sold since January, 1860 to the present time, and also the highest figure at which they have sold during the period, and their recent quotations:

| Name of road. | Lowest price. | | Highest price. | | Present pr. | |
|---|---|---|---|---|---|---|
| N. Y. Cent | 68 | Apr. '61 | 145 | Mar. '64 | 93¾ | Au. '65 |
| Erie | 8¼ | Jan. '60 | 125¼ | " " | 92½ | " " |
| Erie preferred | 52½ | " " | 116 | Apr, " | 87 | " " |
| Hudson River. | 31½ | Jun '61 | 180 | July '63 | 113¾ | " " |
| N.Y.& Harl'm, | 8 | Mar.'60 | 282 | Jun '64 | not on m rket | |
| N.Y. & H.pref | 27 | Dec. '60 | 153 | Aug. '63 | ..... | |
| Michigan Cent. | 35 | Jan. '60 | 157 | Apr. '64 | 108½ | Aug'65 |
| Mich. S& N. I | 5 | Feb '60 | 118¾ | " " | 67 | " " |
| M. S.& N. I — guaranteed | 11¼ | " " | 165 | " " | 140 | Feb.'65 |
| Panama | 97½ | Apr '61 | 300 | Aug. '64 | 235 | Au. '65 |
| Clevel'd & Pitt | 5 | Mar. '60 | 132 | Apr. '64 | 71¼ | " " |
| Clvd. Col. & C. | 86 | Feb. '60 | 182 | Dec., '64 | 130 | Au. '18 |
| Clevel'd & Tol. | 18⅝ | " " | 157 | Apr. '64 | 102 | " " |

It will be perceived from the above that the greatest increase has been on the Harlem, from 8 to 285; it is not, of course, pretended that this was based on merit, as it has never paid a dividend either before or since; but was merely the accidental result of gambling in the stock, in which the moral game of "dog eat dog" was so freely indulged in.

OTTAWA AND ASSINABOIN RAILROAD.—During the next session of the Canadian Parliament the Ottawa and Assinaboin Railway Company will apply to be incorporated, and ask for permission to build a railway connecting Ottawa with Fort Garry. The proposed route it said to be via lakes Nipissing, Tenis caming, and Neepigon. When the main route is completed the company propose building a branch from Smoke River to Lake Huron, and another from Neepigon Lake to Neepigon Bay, and Lake Superior.

ALBANY BRIDGE.—The bringing of the Hudson River between Albany and Greenbush is now a fixed fact. All the piers are completed and the work on the structure is progressing rapidly. Its eastern approach is located about a quarter of a mile up the river from the Western Railroad Depot, and its western end is in the New York Central Railroad yard in Albany. When completed, cars of the Western, Hudson River and Harlem railroads will be enabled to form a direct connection with those of the Central trains, and those loaded with freight (and eventually passenger cars) will continue on to Buffalo and the Great West without breaking bulk.

## REVIVAL OF TRADE AND THE PRODUCTIONS OF THE WEST.

The merchants of St. Louis, several weeks since, as though in emulation of the example of their brethren of the lake port towns, proposed a third Commercial Convention in their city. It has not yet been held; but the capitalists of Iowa and Missouri have had consultations and are taking means to re-open communication, and establish new avenues of commerce between the two States, with direct reference to a future and extensive trade with the ports on the Mississippi River. Of their eventual success we have no fear; and it should be the endeavor of all having the prosperity of our common country at heart, to give them countenance.

In response to this movement the marts of New Orleans already exhibit signs of revival. Every description of Southern, Western and Northern produce is coming forward with remunerating returns; the old merchants are resuming business, and capital is invested there for the establishment of new business relations. The New Orleans *Times* says:

"Dealers in Western products are now doing more business than at any time during the season, or since 1860. Stores and warehouses on Poydras street, from the levee to Circus street, or below the market are, with only an exception, under rent and occupation. The building forming the corner of Magazine and Poydras streets, erected on the ruins of the burnt property of March last is nearly completed. Rents on Poydras street have been enhanced materially over last year, but are not yet up to the figures of 1860. There has been a marked advance of real estate on this street. In 1861, stores which were sold at $36,000 or thereabouts, were resold in 1864 at $50,000, and can not now be purchased at $65,000. The new building forming the corner of Poydras and Magazine divided into two tenements and only three-storied, is leased for $7,000 per annum.

"In the newly opened vista to the future prosperity of our city, we have to notice the formation of a new line of steamships between this port and Rio de Janeiro, which, early in the approaching business season, will connect us with the so long contemplated intimate business relations with Brazil, furnishing to that highly favored section such products of our soil and industry as it has hitherto received from other and more distant markets—such as flour, which our people can send them of superior quality to the "Haxall," and at a cheaper price and rate of freight, under the new auspices, and receiving in exchange her coffee and other products, for a supply of which our own people and those of the entire Valley of the Mississippi have hitherto been in a great measure dependent upon Baltimore and other markets.

"We learn also that the communication with Texas by steamships will shortly be resumed. The trade with the adjacent islands, hitherto so profitable, is now in process of resumption."

The same impulse is felt at the Eastern seaports. The war had turned the currents of trade from their ordinary channels. Active hostilities not having closed in the spring of 1865, the period for spring trade had passed, without indications of revival. The summer months did not, however, display any considerable activity. It is now autumn, and we are fast experiencing the effects of the change from a state of war to that of peace. Our merchants are confident that trade will resume the old avenues, and are engaged in active

preparations for that event. Importing has received a fresh impetus; the custom house is collecting duties in larger amounts than ever before; and the quantity of goods in bond is unusually small. Business connections have been again established with New Orleans, Mobile, Savannah, New Berne and Norfolk; cotton is coming to this port in unexpected quantities, and the return trade is more than usually large.

Boston is also awake to the matter of direct trade with the South. The Boston *Herald* speaks of the subject as follows:

"At the termination of the war, New York was ready to establish lines of steamers with every Southern port, and these lines are already paying large profits on the investment of capital, besides doing the more important work of attracting trade to that commercial centre. Meanwhile what is done for the interests of Boston? This city is the centre and the natural metropolis of nearly all the manufactures of cotton in the country. The cotton now coming forward so rapidly from New Orleans, Mobile, Savannah, Galveston and Charleston, is either brought to New England or carried to Europe. We want the Southern staples, and the South wants, in return, the goods we manufacture—not only cotton and woolen fabrics, but manufactures of leather, straw, rubber, wood, iron, glass, etc. New England is a hive of industry, and it must have raw material first, and then a market. Our business men should multiply our present means of communication with Southern ports, which will fairly compete in cheapness and promptness with those provided by our rival city."

It is apparent that the European market can not be relied upon for our flour and cereal products The countries on the Black Sea and the Baltic, as a general rule, will furnish to Great Britain whatever she wants in that line, leaving America an opportunity only in years of short harvests.

In 1863 we contributed 35 per cent. of wheat, and 57 per cent. of the flour received by that country; and in 1864, we shipped 28 per cent. of the wheat, and 40 per cent. of the flour; whereas, this year our export of wheat has dwindled down to 3, and of flour to 7 per cent. Russia in the same period has increased her supply of wheat to the British market from 14 to 36 per cent., and France her supply of flour from 27 to 79 per cent. The average importation of wheat is about eleven million hundred weight, and of flour two and a half millions. Although the crop in England and France this year is short, Russia is still increasing her supply; and it will henceforth be impossible for our forwarders to calculate upon British demand for American cereals.

Instead, therefore, of expecting Canada with her immense indebtedness to enlarge canals, and to suffer western cargoes to use them substantially free of tolls, or looking to other schemes of cheap transportation to enable our forwarders to undersell European corn merchants in the British market, true commercial sagacity will dictate that we shall find other outlets for our surplus products, and also to change our production so as to furnish the British and other markets with those articles which are actually required.

For example, every steamer from Europe brings intelligence of the great mortality among cattle by the destructive rinderpest. It will take years, after the scourge shall have ceased, to rear animals to make good the losses. Yet, of late, the consumption of beef in England has largely increased. We, too, have experienced a large reduction in the number of our cattle, owing to the demand created by the war. But we have the means to make good the deficiency at an early day, which Great Britain and Europe have not. Instead, therefore, of incurring the annual risk of glutting their markets with grain which can be produced at nearer points, good sense as well as good husbandry would dictate that our western agriculturists and forwarders should undertake to supply them with beef.

The English market will also be open perennially for American butter and cheese. The receipts of the leading articles of produce at the port of New York for the first eight months of each of the years 1863, 1864, and 1865, show a great falling off in the receipts of Western bread-stuffs; whereas butter and cheese have largely increased, the former footing up 195,100 packages in excess of the same period of 1863, and 88,000 packages over 1864.

The causes of the increase of demand for butter are worthy of attention. Ireland is the dependence of Great Britain for this staple. The increased price of meats has led the landholders of this island to turn their attention from the manufacture of butter to the production of beef, and thus compelled a resort to other countries. Hence the demand, and prices have been largely enhanced with us, and the enlargement bids fair to be permanent. The *Irish Farmers' Gazette* thus sets forth the falling off in Ireland:

"The number of cattle increased up to 1859, at which time there were 3,815,598 head in Ireland; the number then decreased until last year, when the total showed an increase, owing to a large number of calves having been reared from the demand which existed for young beasts, both for stocking Irish pastures and for exportation to Great Britain. Still, as compared with 1859, the total last year was 558,289 head short in point of number.

"Cattle rearing and dairy farming being leading characteristics of Irish agriculture, it would naturally be supposed that every effort would be made to keep the number of milch cows. This supposition has not been realized, however, for we find that while there were 1,690,389 cows in Ireland in 1859, the numbers have so diminished that last year the total returned by the registar general under that head amount only to 1,846,217, being 344,172 cows less than in 1859. If we calculate that each cow would produce 200 pounds weight of butter in the year, it follows that the supply last year of this essential article in the general dietary of the population was 68,834,400 pounds short of what it was in 1859—a very serious decrease, so far as consumers are concerned, and very serious also as regards the farmers of Ireland, for it may be taken as representing a diminution of the receipts not much short of £3,441,720 ($17,408,600) for last year alone."

Our Western agriculturists and forwarders are aware toat the ocst of placing beef cattle, butter and cheese in the English markat is a little greater than that transporting grain; while the surer market must obviate all the objections to the change of their snpplies.

But every consideration of policy and interest demands the development of a home market. We therefore have abundant cause for gratificotion at the effort of the merchants of St. Louis, Boston and New York, to open anew and extend further their commerce with the Southern States. We hail also with undissembled pleasure the endeavorv to restore industry in the South, to place the cultivation of cotton on a permanent basis, to develop new sources of labor, and to colonize those state with Northern men and emigrants from Germany and Northern Europe.

The Chicago *Tribune* presents the following *resume:*

"Exclusive of cotton, rice, cane, sugar and molasses, which are not Western products the United States exported in the year ending June 30, 1860, to all foreign countries, $61,-891,042. Exclusive of the same products, the Western States produced 40 per cent of the whole agricultural product of the Union.—Assuming that the Western exports in the same ratio that it produces, and we have a foreign market for $24,800,000 of the value of all agricultural articles produced in the Western States. As the total agricultural production of the Western States is about 1,159 millions of which say 259 millions may be deducted for the value of farming implements, animals held for use, improvements, wear and tear, &c., there remain 900 millions for consumption in the producing States, and for market in other States and foreign countries It therefore appears that the proportion of the market furnished by the United States for our produce, compared with that furnished by all foreign countries, is as $37.50 to $1.00."

This shows conclusively what we have endeavored to demonstrate, that the American and especially the Western producer, must look to his own country for the customers. The South must speedily triple its inhabitants, and with them increase manifold the quantity of its products. Nor must the population rest content with producing raw material for a Northern and European market. They must and will add manufacturing to their avocations. In 1860 the annual product of Southern manufactories amounted to $283,188,000—There is every reason for a tenfold increase. The demand is sure to be enhanced The four millions of colored population will become large consumers of manufacturing goods. That class of white inhabitants that heretofore produced little and consumed in like degree, will now be added to the category. The new comers from Europe will swell the number. It is preposterous to suppose that they will be content to produce cotton and tobacco for the other parts of the world, and depend on distant countries, when they have all the facilities, raw material, water-power, coal and labor, to produce their manufactured goods at home. They will do no such thing. This new organization of industry in those States will modify the character of employments in those parts of the county, and will, at the same time, make the South the outlet for the agricultural products of the West.

By thus changing the character of the exports over the Atlantic, and making the inhabitants of the Southern States the principal customers of the West, and the people of the Western States in return the purchasers of Southern staples, and particularly manufacturers, the great complaint mode by Western forwarders, want of access to market, will be obviated; and at the same time the convenience and prosperity of both districts of our country permanently assured, because interest, commerce, institutions and a common nationality, will prove to be a "threefold cord not easily broken.'

---

☞A man has just taken out a patent for luminous hats. They would, he says, preserve the wearers from being run over by cabs at night, and would, to some extent, enable a saving of the lighting of streets with gas to be effected.—*London Paper.*

## THE RAILWAY TO KNOXVILLE.

We are glad to see the *Gazette* waking up to the great enterprise of connecting our central railroad system with the southern roads, throwing open to Cincinnati the rich trade of the whole South. It is what should have been done years ago. Commerce and mutual interest are wonderful promoters and cementers of brotherly love; and unless the short-sightedness of our citizens, as heretofore, prevents them from grasping the prize held out to them, we may yet reap a great harvest from this source. The difficulties in the way, suggested by the Gazette, do not amount to much. The Kentucky Central is as desirous of increasing its business as any other road, and can be faced with equitable terms, and if no provision can be made for the charter, we can furnish one with all the powers desirable. The *Gazette* says:

Our citizens are agreed that this road must be built, and we believe they are ready to help it. How shall ther zeal he organized to operate in the work? It will not he done by great capitalists, so we need not await for them. It interests every trader, manufacturer and mechanic in Cincinnati, and these will have to take hold of the work. First it is necessary to provide for a consolidation, on fair terms, with the Kentucky Central Railway, and to see that the charter is satisfactory. It is probahle that the first can be arranged fairly, and we presume the second is provided for.

When these matters are arranged, the effort must be organized so as raise the aid our city ought to furnish by a popular subscription to the stock. If all who are concerned will help, the requisite sum can he collected without any one feeling the burden. It must be raised by a popular movement, or it will not be raised at all. We have no resources in the city corporation to draw upon, nor ought we to have; and we have no great capitalists who are ready to invest money for the public benefit. There is no such breed of capitalists anywhere. A proportion must be furnished hy subscription, and this can be done only by the co-operation of those who live on the route of the railway and are to be benefited by it. Upon a reasonable subscription the rest of the money can be borrowed upon bonds.

What we want first is an organization to co-operate with the Tennessee and Kentucky friends of the road, to arrange the conditions, and to combine the zeal of our people into action. With energy worthy the enterprise the road may be huilt and rnnning next season.

---

—The earnings of the Erie Railway for the month of August were:

| | |
|---|---|
| 1865 | $1,364,125 89 |
| 2864 | 1,105,354 58 |
| Increase | $258,761 31 |

—The earnings of the Racine & Mississippi and Northern Railroad, for the week ending Sept. 7, were:

| | |
|---|---|
| 1865 | $15,344 41 |
| 1864 | 13,245 53 |
| Increase | $2,098 88 |

## THE RUSSIAN TELEGRAPH.

With regard to the telegraph connecting Europe with America, through Russian territory, proposals were made to the Emperor to undertake the work as far back as 1854, but declined. The government, at its own expense, ordered the construction of a line which passes from Moscow, by Kazan and Irkoutsk, to Verchneoudinsk, with a branch line to Kiachta. To continue this line to Nicolaieffsk, at the mouth of the Amoor, there remains little to be done, and then the works can he commenced which have been undertaken by an American company, with a capital of ten millions of dollars. According to the terms of the contract hetween the Russian Goverument and this compeny, a telegraphic line is to be completed within five years, passing through the Behring Straits, the Russian possessions in America, and English Columbia, to San Francisco, where it would join the American line. The conditions agreed to by the company are most advantageous to the company. The privilege of the company for the line between Nicolaieffsk and the American lines is only for thirty-five years. The company undertakes to erect at its own cost, along the whole line, roads, bridges, and stations. As regards the latter, it reserves to itself the right of occupying them, as also the block-houses of the company, should circumstances render such a step necessary. All the servants of the company upon Russian territory are to be of Russian nationality.

From San Francisco the line will be carried through British Columhia or New Caledonia into the Russo-American Possessions on the north-west coast of the American continent. The communication between the opposite shores of Asia and America will be established in latitude 62. The distance across is 400 miles, hut an intervening island reduces the distance to which it will be necessary to extend the submerged portion of the cable to only 250 miles for the longest interval. In Asia the line will he taken up hy Russian officers, and completed so as to connect it with St. Petersburgh through the mouth of the river Amoor, in latitude 52 20. From New Westminster, at the mouth of the Frazer River in British America, to Nicolaieffsk, near the Amoor, is 4,000 miles. The line will be completed through a large part of the Frazer River Valley the present season. Since February last 250 men have been at work upon this section of it. Next spring there will he on the ground the wire and all materials necessary for the prosecution of the work for the remainder of the route on this continent. The materials will include 200 miles of submariue wire. The California, *Alta*, from which we collect these facts, mentions the clearing from the port of San Francisco, on the 10th ult., of the bark Golden Gate, the flag-ship of the telegraph squadron, which was bound for the Gulf of Anadir and the shores of Behring's Straits, with Colonel Bulkley, Superintendent, and his staff on hoard. A propeller, the George S. Wright, was a consort of the Golden Gate. The barks Clara Bell and Palmetto, and schooner Milton Badger were up the coast. The five vessels mentioned form the telegrapbic squadron.

The Golden Gate, as she proceeds northward, will stop at the mouth of the Kvichpak, (pronounced Vik-pak,) which is a great river, with a delta 100 miles wide, reaching from 61 degrees 30 minutes to 63 degrees. Here Mr. Kennicott and party will disembark. It will be their duty to ascend the river and explore its course—something which has never been done heretofore, althoug some Russians attempted it fifteen or twenty years ago. It is supposed that the Kvichpak is the same stream as the Youken, into which the Pelly River of British America empties. Mr. Kennicott spent four years on the Youken River, about latitude 65 degrees, in the service of the Smithsonian Institute, and therefore the present enterprise is not altogether novel to him. While Kennicott goes up the Kvichpak, Major Pope will go up Frazer River and down the Pelly and Youken to meet him. Major Pope started in May last. Colonel Bulkley will also land a party at the mouth of the Anadir River, at latitude 65 degrees in Siberia, and it will be their duty to ascend that stream, and they will be met by another party, to he sent out by Major Abasa, a Russian nobleman, who, after having studied the telegraphic business in the United States for several years, has taken part in the undertaking.

## CONDITION OF THE TREASURY OF OHIO.

OFFICE OF THE AUDITOR OF STATE,
COLUMBUS, O., Septemoer 18.

I hereby certify that the following are the cash balances in the Treasury of the several funds, as shown by the books of this office at the close of business on the evening of September 11, 1866, viz:

| | |
|---|---|
| General Revenue Fund | $403,216 27 |
| Sinking Fund | 207,514 59 |
| Common School Fund | 42,423 09 |
| Volunteer Relief Fund | 43,005 13 |
| Allotment Fund | 237,252 08 |
| Soldiers' Claims Fund | 20,573 73 |
| National Road Fund | 4,426 68 |
| Bank Redemtion Fund | 1,903 25 |
| District School Library Fund | 82 15 |
| Total Cash Balance in Treasury September 11, 1864 | $960,397 97 |

And I further certify that I have counted the funds in the vaults of the Treasury, and examined the balance sheets and accounts current of the American Exchange National Bank of New York, and of the Bank of the Ohio Valley, at Cincinnati, Ohio, and find the following amounts, being the exact sum which, according to the Auditor's and Controller's books, the State should hold, and in the kind of funds hereinafter stated, and that I have examined and counted the securities and blank circulation of the several Independent Banks and free banks of the State, and find them to correspond accurately with the requirements of the Auditor's and Controller's office.

The classification of the funds is made out at my request, they having been received heretofore, and paid out indiscriminately:

STATEMENT OF ASSETS IN THE TREASURY.

| | |
|---|---|
| U. S. Currency | $114,432 53 |
| U. S. Currency, $1 notes under U. S. seal | 4,000 00 |
| U. S. compound interest notes, dated June, 1864 | 11,606 00 |
| U. S. compound interest notes, dated July, 1861 | 36,000 00 |
| U. S. compound interest notes, dated August, 1864 | 36,000 00 |
| U. S. compound interest notes, dated October, 1864 | 970 00 |
| U. S. compound interest notes, dated December, 1864 | 1,430 00 |
| U. S. compound interest notes, | |

| | |
|---|---|
| various dates, 1865 | 35,700 00 |
| U. S. two-year 5 per cent. interest notes, interest runs with bill, dated March, 1864 | 6,300 00 |
| U. S two-year 5 per cent. interest notes, interest runs with bill, dated April, 1864 | 9,550 00 |
| U. S. two-year 5 per cent. interest notes, interest runs with bill, dated May, 1864 | 700 00 |
| U. S. two-year 5 per cent interest notes, due with six months interest, December 1, 1865 | 266,100 00 |
| U. S. seven-thirty bonds. February coupons off, August 15, 1864 | 48,500 00 |
| U. S. seven-thirty bonds, all coupons on, June 16, 1865 | 28,000 00 |
| U. S. seven-thirty bonds, all coupons on, July 15, 1856 | 140,700 00 |
| U. S. postal currency | 372 84 |
| Coin—silver | 2,114 50 |
| Coin—gold | 65,319 50 |
| City Bank, Columbus, redeemed | 310 00 |
| Ohio currency | 1,019 00 |
| National Road bonds | 60 37 |
| Ohio Tool Co., check on National Exchange Bank, Columbus, received from contractors | 731 61 |
| J. Karr, Ohio Military Agent, on U. S. Department, Cincinnati, received far transportation | 318 35 |
| J. Karr, Ohio Military Agent, on U. S. Department, Cincinnati, received for transportation | 320 85 |
| Evans & Co, on Evans & Co., Cincinnati, received for transportation | 181 50 |
| Jay Cooke & Co., on Vermilye & Co., New York, received for transportation | 251 53 |
| Jay Cooke & Co., on Vermilye & Co., New York, received for transportation | 236 94 |
| U. S. Paymaster Jones, on U. S. Department, New York, received from Commissioner of Soldiers' Claims | 165 05 |
| First National Bank of Nashville, on Fourth National Bank of New York, received from Commissioner of Soldiers' Claims | 285 00 |
| Second National Bank of St Louis, on Ninth National Bank of New York, received from Commissioner of Soldiers' Claims | 125 00 |
| Bank of Ohio Valley, Cincinnati, balance as per acc't current | 123,478 31 |
| American Exchange National Bank, New York, as per acc't current | 21,946 09 |
| Cash assets in Treasury, Sept. 18, 1865 | $960,397 97 |

And I further certify that there is in the State Treasury the additional sum of $2,890 47 belonging to the several bank funds as stated below, viz:

| | |
|---|---|
| Seneca County Bank Fund | $ 576 95 |
| City Bank, Cincinnati " | 1,516 01 |
| Canal Bank, Cleveland " | 366 37 |
| Due Free and Independent Banks | 431 14 |
| Total | $2,890 47 |

JAS. H. GODMAN,
Auditor of State.

Having assisted the Auditor of State in counting the funds in the Treasury, I certify the foregoing to be correct.

M. R. BRAILEY, Controller.

By JUSTIN MORRISON, Chief Clerk.

## RAILROADS.

RAILROAD FROM BLAIRSVILLE TO FREEPORT.—The branch railroad from Blairsville, on the Pennsylvania Railroad, to Freeport on the Allegbany River, is completed and ready for use. At Freeport this line strikes that of the Alleghany Valley Railroad, running thence to Kittanning, and now in progress of extension beyond that point to the oil region. This branch having been built by the Pennsylvania Railroad will be worked by that Company as an avenue for the coal, iron, and petroleum trade between the Alleghany Valley and Philadelphia. Previously all those staples had to go to Pittsburgh to find shipping hither. Now, the commerce floating down the Alleghany River may find a depot for shipment east at Freeport.

This branch may, and doubtless will, also be worked as a part of a through route between Pittsburgh and Harrisburgh *via* Freeport and Blairsville, using the Allegbany Valley Railroad from Pittsburgh to Freeport. The overcrowding of the main line of the Pennsylvania Railroad will bring this much into use.—*Philadelphia North American.*

THE Dubuque and Sionx City Railroad has been completed to Applington, a point twenty-four miles west of Cedar Falls. Trains will hereafter run daily to and from that place.

NEW LISBON RAILROAD.—The last rail between Leetonia and the crossing of the Pittsburgh, Fort Wayne, and Chicago Railroad was spiked down on Thursday, August 31st.

THE Jackson (Miss.) *Argus*, of the 17th ult., learns that the railroads in the country about Selma are being rapidly put in order, and business is being resumed to a very considerable extent. The railroad bridge over the Tombighee, at Demopolis, on the Selma and Meridian Railroad, will be completed in about a month. The Alabama and Tennessee road from Selma to Blue Mountain is in complete running order. Considerable trade and travel are passing over it. Repairs on the Montgomery and West Point Railroad will be finished in a few days. This will make the connection direct from Montgomery *via* West Point to Atlanta, and thence north and east by the way of Chattanooga and Nashville.

LEBANON AND PINEGROVE RAILROAD.—The surveys for this road have been completed, and the work will be soon put under contract, with a view to its early completion. The length of the line located from Pinegrove to Lebanon is about twenty-three miles, with a maximum grade not exceeding thirty feet in the mile, against the coal trade, encountered in mounting over the gravel ridge through which the Union Canal passes in a tunnel.

The Blue Mountain, which is between Lebanon and Pinegrove, is cut to its base by the Swatara Creek, through which gap the railroad will pass

The North Lebanon Railroad was built to carry iron ore from the Cornwall Hills to Lebanon, and the Pinegrove road will be built to carry anthracite coal to Lebanon, thereby giving Lebanon great advantage for the manufacture of pig-iron, by reason of its proximity to ore and coal. And when the railroad surveyed from Carlisle to the South Mountain Iron Company's vast deposit of hematite ores shall have been completed, these ores will be mixed with the magnetic ores of Cornwall, just as the iron ores of New Jersey are carried into the Lehigh Valley for admixture with Lehigh ores.—*Philadelphia Mining Register.*

## PETROLEUM AS STEAM FUEL.

BY C. J. RICHARDSON.

As the patentee of the mode for burning petroleum as steam fuel, now being experimented upon at Woolwich Dockyard, permit me to reply to the article by Mr. Paul, which appeared in the *Chemical News*, of December 17 last. (See *Jour. Frank. Inst.*, vol. xlix. p. 130)

The relative heating powers of petroleum and coal as depending upon their chemical composition is not the question; the ability of each to create steam is the real matter to be considered.

Petroleum as steam fuel can be very nearly fully utilized; it produces no ash, submits to mechanical management, and makes little or no smoke, does not require any strong draft or current of air like coal, which will not burn without it; and the consequence of which is, a very considerable portion of the fuel is lost as waste heat in the chimney.

In a late work by Mr. Wye Williams, one of our chief authorities on this subject, entitled "On the Steam Generating Power of Marine and Locomotive Boilers," he details three careful experiments as to the best form of boiler to obtain the greatest amount of heat from coal. He gives the temperature of the waste heat in the first experiment as 1060°; to the second, 760°; and the third, 635°—and this, he it observed, with the consumption of 3½ cwt. of coal to each experiment. I should like to learn the temperature of the waste heat in the chimney of a furnace burning from twenty to thirty tons of coal per day. We know the current is so strong that it often carries up small coal and cinders along with it; that the heated gases often take fire by a spark from the furnace, and burn at the top of the funnel with a fierceness almost equaling the flame from a blast furnace. Is this flame or waste heat employed in creating steam? and how much is the coal utilized? In practice, the ratio of the heating power of petroleum and coal is about =1·4=0·4. We shall never learn the wicked waste we are making of our coal until petroleum supersedes it.

The American plan can be seen by inspecting the French patent; it was not likely to be successful; it does not follow that other more simple methods may not succeed.

My grate, which burns petroleum through a porous material, has in every instance, when put under a boiler, proved petroleum to be full five times more powerful than coal for steam purposes—one ton doing as much as five tons of coal. If four tons out of five are saved for freight space, the price of the latter being 7*l.* per ton, the profit on every ton of petroleum would be 14*l.* 15*s.*,—the coal at 15*s.*, the petroleum at 17*l.* per ton.

But a shipowner might not select the American crude at 17*l.*; he would take the Flintshire coal oil, quite as good for his purpose; this is only about 10*l.* per ton.

The average price of coal on a long voyage would be low at 2*l.* per ton. Taking these prices and freights at the reduced price of 5*l.* per ton, in a ship requiring 500 tons of coal, and using instead 100 tons of petroleum, would gain by the exchange 2000*l.* It would not be necessary to start with the full quantity of petroleum, it being more distributed about the earth than coal, obtainable at first cost in the oil countries.

As to the alleged advantage of the oil taking up less room than coal, no notice need be taken of it; a great deal more might be

said of the advantage of a ship being able to go from port to port without turning aside for fuel.

Now, as to the highly dangerous, inflammable nature of petroleum. this is in a very great part fudge. If the oil were contained in cast iron cases securely closed, no vapor could escape; or if the small amount of spirit which produces the inflammable vapor was first extracted, the residue, the burning oil and heavy petroleum, would be no more dangerous than so much lard or spermaceti.—*London Chemical News*

## A RIGHTEOUS VERDICT.

There have been a great many since, but an effort of memory will enable our readers to recollect an "accident" on the Oil Creek Railroad, near Titusville, Pa., rather more than a week ago. A coroner's jury has returned a verdict on an inquisition upon the body of one of the victims, and we hasten to commend it for an example to the jury now dealing with the Long Island murder. The Housatonic jury rendered a truthful verdict, but this from Pennsylvania is even more direct and practical Moreover, they have a way in Pennsylvania of surrounding their coroner's inquests with impressive legal formalities not known to us, but that might be beneficially imitated. The jury in this case "do say upon their oaths that the diseased came to his death from injuries received by the collision on the Oil Creek road," which collision was caused by the culpable negligence of Joseph Funk, engineer, and Patrick Carey, conductor, as by the evidence shown. These officials had the control of one train, and neglected to announce its presence on the track, although they knew another train was approaching, which had the right of way. But the verdict does not stop there. The jury declare "that the evidence shows that the president and directors of said Oil Creek Railroad are criminally liable for the killing of said E. Steele Greene, by refusing and neglecting to furnish reasonable and ordinary accommodation for passengers traveling over said road." How many railroads in this vicinity could escape on such an indictment as that? The verdict proceeds: "Said E. Steele Greene was compelled to stand on the platform of a passenger car where he was crushed and injured, and came to his death by the collision as before described, which would not have happened but for the refusal and neglect of the said president and directors to supply as many cars as the superintendent and conductors declared necessary."

That completes the case against the railroad officials, but the jury do not yet deem their duty discharged. They take one step further. "We therefore request the Coroner to issue his warrant for the apprehension and trial of said Joseph Funk and Patrick Carey, together with the president, directors and managars of the said Oil Creek Railroad, who by their culpable negligence, as proved by the evidence, have caosed the death af said diseased." And finally they arraign the whole management of the road as furnishing insufficient passenger and freight accommodation, and creating unnecessary risk of life and limb for the sake of saving a reasonable outlay of money.

There is a striking similarity between the murders on the Oil Creek and on the Long Island railraods, since in both cases the passengers killed came to their death from being compelled to stand on the platforms. In the matter of culpable carelessness of engineers, conductors, president and directors there is little to choose between them. On the Oil Creek, the Long Island, the Housatonic, the Hudson River, and almost every other railroad, the guilt belongs equally to many officers Possibly those officers will begin to realize their personal responsibility, as they find themselves charged by successive juries with the crime of murder. Certain it is that if juries and prosecuting officers will do their duty, and especially if legisiators will affix just penalties to their crimes, we may hope sooner or later to see our railroads managed with some regard to the safety of passengers, as well as to the dividends of stockholders.—*N. Y. Tribune.*

## A NEW ROAD ACROSS THE CONTINENT.

The following letter from Dr. Macgowan, who has been attached by Government to the Commission charged with convening the Indian tribes in our Western Territories, will be read with much interest:

FORT SCOTT, KANSAS, Aug. 29, 1865.

WM. COVENTRY H. WADDELL, Esq, *Secretary American Geographical and Statistical Society:*

SIR: A discovery, lately made by Mr. Butterfield, agent of the Overland Dispatch Company, possesses not only geographical interest, by making us better acquainted with the interior of this continent, but is of great value in a mercantile point of view. The discovery makes known a route across the plains which reduces the distance to Denver 100 or 150 miles, and which has the advantage of avoiding the terrible alkali springs of the Platte route, via Fort Kearney, which are so fatal to cattle, occasioning the death in some seasons of thousands of animals.

This new channel has the further advantage of enjoying a fortnight's earlier verdure than that of the Platte river. This newly discovered route to the Rocky Mountains lies up the valley of the Kaw, or Kansas, to the fork of the Smoky Hill river, and thence up that valley to the center of the continent at Denver. It presents a direct route from New York through St. Louis to the great mineral regions of the West. An officer of the United States army was detailed to accompany Mr. Butterfield's expedition, to make topographical observations, whose report will be published by the General Government. Meanwhile, arrangements are making for the transportation of passengers and freight across the Plains by this route, which in six weeks will be completed; the company having abandoned the old channel of communication between the East and the West.

Lawrence, the present terminus of the Union Pacific Railroad, will be the new point of departure. It is believed that this will give an increased impetus to the vast traffic which is now carried on between a few points on the Missouri River and the territories of Colorado, Idaho, Montana, Utah, New Mexico, and Arizona, while it will afford increased facilities to the stream of emigration which is flowing into and across the Plains. Correct statistical information regarding the overland traffic is not easily attainable, but data for a calculation are furnished by the business of the Overland Dispatch Company, which transports about one-tenth of the freight sent across the Plains This Company by the close of the season will have sent 25,000 tuns, employing nearly 2,000 wagons and 80,000 oxen. A single merchant at Salt Lake City pays this season $150,000 for freight. These facts demonstrate the importance of expediting the work of the Pacific Railroad Company.

Respectfully, D. J. MACOWAN.

## CANAL TOLLS FOR 1865 AND THE SIX PREVIOUS YEARS.

The receipts of canal tolls, in New York, from the opening of navigation to August 1,

| | | | | |
|---|---|---|---|---|
| 1865, are | | | | $1,339,910 |
| Same for 1864 | $1,769,880 | Comp. loss | | 438,970 |
| " 1863 | 2,101,703 | " " | | 773,793 |
| " 1862 | 2,151,169 | " " | | 820,299 |
| " 1861 | 1,446,154 | " " | | 115,254 |
| " 1860 | 1,154,472 | " gain | | 176,438 |
| " 1859 | 686,249 | " " | | 644,661 |

The comparative losses and gains between 1865 and the previous years, show material differences:

| | |
|---|---|
| Lockages at Alexander's Lock, in May, June, and July, 1864, were | 10,650 |
| Same in 1865 | 8,486 |
| Comparative falling off | 2,164 |

INNIAN RAILROADS.—The through line from Lahore to Noolsan on the Indus is now in operation. The Branch Line of the Great Bombay and Calcutta, which pierces the cotton country to Nagpore, is making great progress; and the contractors who have this line from Labore or Umritsir to Meerut and Delhi in hand, are hard at work. The only break which remains to be considered is that along the desert side of the Indus from Mooltan to Kotree, the terminus of the line from Kurrachee; and this will soon have to be connected by iron links. Then Calcutta will be in direct communication by rail with Kurrachee, 2000 miles off, with Bombay, 1600 miles off, and with Nagpore, 1100 miles off. Whether we look at the magnitude and solidity of these works, or at the distance which they traverse, the railroads of India will far surpass any like works in Europe, and closely compete with the greatest projected works in America. They will cover 5000 miles, and cost £70,000,000 sterling ($350,000,000 dollars.)

ALBANY & SUSQUEHANNA RAILROAD.—The following gentlemen have been elected directors of this company for the ensuing year:—Joseph H. Ramsey, Jacob Leonard, Peter Cagger, Edward C. Delavan, Albany; Charles Courter, Cobleskill; John Westover, Richmondville; John Cools, Worcester; Jared Goodyear, Colliersville; Eliakim R. Ford, Oneonta; Arnold B. Watson, Unadilla; Lewis Northrup, Centre Village; Alonzo Everts, Binghamton; Danial Drew, New York.

At a meeting of the directors, Joseph H. Ramsey was chosen president, and Jared Goodyear vice-president for the ensuing year.

SPRINGFIELD & NORTHWESTERN RAILWAY.—A contract for the construction of the Springfield & Northwestern Railroad of Illinois has been let to Messrs Ball & Schofield of the St. Louis, Albany & Terre Haute Railroad, at a cost of $910,000 for the 42 miles.

## IRON MANUFACTURES.

The returns of the revenue for a definite period furnish, perhaps, better details of the extent of various branches of manufacture than the usual census The revenue which is received from this department of industry is much greater than is generally supposed.

In the year ending June 30th, 1864, there was a tax paid on 276,192 tons of railroad iron amounting to $295,064.

Putting the several classes in tabular form, iron was made in the following amounts, and yielded the following revenues:

| | Tons. | | Tax. |
|---|---|---|---|
| Railroad | 276,192 | paving | $295 064 |
| Sheet and plate | 195,941 | " | 242 513 |
| Bar and other rolled | 201,279 | " | 279,932 |
| Castings | 172,585 | " | 242,736 |
| Stoves and hollow ware | 82,325 | " | 123,489 |
| Nails, spikes, &c | 129,639 | " | 291,173 |
| Total | 1,015,932 | " | $1,074,907 |

This is exclusive of miscellaneous manufactures of iron, and of marine engines, which paid three per cent.:

| | Total value. | | Tax |
|---|---|---|---|
| Marine engines | $2,181 140 | paying | $65,434 |
| Miscellaneous manufactures | 63,035 390 | " | 1,891,062 |
| Steel, and manufactures of | 12,151,500 | " | 291,111 |

To obtain the value of all these manufactures of iron, a price must be paid to the railroad and bar iron on which tax was so much per ton. Railroad iron averaged $110 to $120 per ton; bar iron $130 to $135 per ton; sheet and plate, $150 per ton. Part of the rails being re-rolled, and are put at but $50 per ton.

These values are estimated by the Philadelphia *Enquirer* nearly as follows:

| | |
|---|---|
| Railroad | $21,429,225 |
| Bar | 27,171,450 |
| Sheet and plate | 9,235,260 |
| Nails, spikes, &c | 19,445,550 |
| Castings | 25,491,100 |
| Marine engines | 2,181,140 |
| Steel, and manufactures of | 12,151,500 |
| Miscellaneous iron manufactures | 63,035,398 |
| Total value, iron and steel | $180,140,615 |

On this aggregate value the direct tax actually paid was $3,822,546 in that year. This is not all the revenue derived from iron, however. The amount of taxes paid indirectly as income tax, and the various taxes on coal and all the adjuncts of manufacture, would at least double this sum of direct revenue. The labor and capital required to produce $180,000,000 in value of iron manufactures represent very large sums. The capital always exceeds the total production, and the cost of raw materials and of labor is nearly 40 per cent. each. So that the total values are nearly as follows, adding to the product a sum to represent the untaxed value of pig iron:

| | |
|---|---|
| Capital | $250,000,000 |
| Raw material | 75,000,000 |
| Labor | 75 000,000 |
| Product | 160 000,000 |
| Revenue | 10,000,000 |

Such was the iron manufacture of the United States in 1863–4, an interest of vast and vital importance in every way in which it can be regarded. It continued as large to the end of 1864, but for the current year, 1865, it is much reduced. Congress reduced the duty on railroad iron, and there has been a large amount imported in consequence. Taxes on labor and material enhanced the price to such a degree that nearly all the furnaces in Eastern Pennsylvania were forced to go out of blast. The rolling mills are half of them silenced, and the great machine shops are far less pressed with orders than a year since.

## HOW TO RESUME SPECIE PAYMENTS.

Some four weeks ago we showed, or tried to show, that the year 1866 should be the time to resume specie payments. We gave the dates of maturity of our debt, proving that in '67 and '68 the amount maturing would effectually interfere with a resumption in those in those years, and that the Presidential election would be a bar in 1869.

At the close of that article we said "How to resume specie payments will be the subject of another article, to be written after more reflection."

We have reflected, studied, canvassed, compared notes, and have come to the conclusion

1. That about all the interest debt that matures in '66 and '67 must be funded into long bonds, and that one half of the Treasury Note Currency must also be funded into long bonds. This would take out of the way, say,

200,000,000 of Compound Notes,
80,000,000 of One-year Certificates,
300,000,000 of 1st series of 7 30s, and
200,000,000 of plain Greenbacks.

780,000,000 total. Of this it will be safe to allow 200,000,000 to remain floating, so that the funding would be 580 million.

2. Levy a tax of one per cent. on every species of property in the country, except Federal bonds. This tax to be collected in June, July and August, and specie payments to be resumed on the 1st of September 1866.

In these measures there is sufficient power to accomplish the object without a doubt. One half of the funding, and one half of the tax here recommended, might bring us to a specie standard, but it is better to make sure of the object on the first effort.

There are several preliminary movements on the part of both the Government and the people which ought to be adopted without delay, such as economy in living, getting out of debt, breaking down speculation, bankrupting the rotten concerns of the country, &c. All this, even the bankrupting, is necessary, that the road may be cleared of combustible material; and then, if by reckless adventures, indiscreet credits, imprudent importations, men and firms will risk their all and more, reasoning (falsely, we hope,) that paper money will carry them safely through, they ought to be wiped out of the way. Nevertheless this class of speculators and reasoners have been right, practically, for the past three months. Everything has been rising, rising, because a large majority of business men are believing that the paper money expansion must be protracted for a good many years. They say, very forcibly, that the Secretary of the Treasury does nothing as yet leading the country to the belief that a specie standard is to be reached during this administration. Of course all who believe this will buy gold, merchandize, produce, real estate,—anything—everything.

Speculative credits are now being piled up fast, and if the same ideas prevail for six months to come that have prevailed for three months past, a very pretty foundation will be laid for a revulsion, and a very sandy one for a resumption.

The Government will, sooner or later, come to the conviction that to bring down the price of gold, check speculation, lessen importations, etc, a stringent and cheapening financial policy must be adopted and persevered in The currency must be reduced; the maturing debt must be taken out of the way by funding it into long bonds, or its payment as it matures will surely keep up an expansion of paper money.

There never will be a better time than now to go earnestly into this funding business. There will not be as good a time in this decade, as 1866 for a resumption of specie payments.—*Thompson's Bank Note Reporter.*

## DIAMOND DRILLS.

We have seen a trial of the diamond drill in blue flagstone. A core, 1¼ inches diameter and 10⅝ inches long, was cut out by it in 4 minutes. The hole was made 1⅞ inches diameter; the feed was at the rate of 56 turns to 1 inch. Another hole, 19½ inches deep, was bored in 7½ minutes, the rate of feed being 78 turns to 1 inch. Another hole, 9½ inches deep, was bored in 3½ minutes, at the same rate of feed. The boring averaged about 2 6 inches per minute. The company guarantee it to cut 4 inches per minute in North River bluestone, sandstone, marble and slate, and 2 inches in granite and harder rocks. With the fast feed it would have been greater had there been more steam; all the steam 50 feet, through a ¾ pipe, with several elbows. The core, which we brought away, is quite straight, and others that we saw appeared so; and the surface is very smooth. Holes bored in this way will be true, and smooth enough for first rate stone-work; and drills may be made to cut holes and columns a foot more in diameter, and of any length required.

The kerf cut is 5-16ths thick; and the power consumed is what is necessary to pulverize this amount of stone. The men worked a drill about half as fast as it was worked by steam, showing that the power required is moderate, and a steam or compressed-air-engine, of simple form, may be used.

The only question is, the durability of the diamonds. If the feed is violent, they may be broken; but when the feed is properly graduated they are not broken, and do not appear to be worn.

In France, where the invention originated, diamonds, set differently, are used to dress burr-stones: and it is claimed that they work more economically than the old tools.

The bores we have seen are made to set, with bayonet joints, on the ends of tubes. There are six diamonds in each; so set as to cut a kerf in which the metal can turn without touching. A stream of water runs in through the tube, and out around it, and washes out the *debris*.

It is claimed that the principle may be applied with advantage to sawing stone; and that very hard stones may be cut by the diamonds, as easily as marble. A chambering drill has been made on this principle, by which the hole at the bottom may be enlarged to twice the size of the main hole.—*American Artisan.*

TEN DAYS.—Our list makes two thousand eight hundred and forty barrels added to the daily product of Western Pennsylvania, in the short space of ten days. Subtract the wells that have failed during that time, and add those that have increased, and the figures are again about balanced. So that, in fact, we are two thousand eight hundred barrels better in our oil product to day than we were ten days ago. At the wells this product is worth about $11,200—a pretty fair daily gain in the oil trade. What business in the country can show such an increase in such a time?—*Pitisburgh Oil News.*

## MONETARY AND COMMERCIAL.

If we were to give an entirely correct account of the money market and of stocks and financial affairs for the last month, we should say: they were at a *stand still*; that is, in *status quo*. Relatively for a few weeks there has been little doing. In the last week there has been a slight decline in gold, as shown by the following table:

| | Opening. | Highest. | Lowest. | Closing. |
|---|---|---|---|---|
| Sept. 11..... | 144⅝ | 144⅝ | 144½ | 144⅝ |
| Sept. 12..... | 144¾ | 144⅝ | 143¾ | 145⅜ |
| Sept. 13..... | 143⅝ | 143⅜ | 143 | 143¾ |
| Sept. 14..... | 143⅞ | 143⅞ | 143¼ | 143½ |
| Sept. 15..... | 143½ | 142⅝ | 142⅝ | 142⅞ |
| Sept. 16..... | 142¾ | 143½ | 142⅜ | 143½ |
| Sept. 18..... | 143 | 143 | 143⅝ | 143⅝ |

Yesterday it opened at 143⅝, advanced to 144⅛.

On the 20th there is still little change. The uniformity of these rates, when compared with the extraordinary fluctuations last year, are really remarkable. It call to mind, also, the immense powers which speculators had over the currency during the war. Even the above prices are almost entirely imaginary. There is no real reason why gold should be 44 more than 10 per cent. over legal tenders. That there should be some difference between gold and government paper, not yet redeemable is obvious; but why should that ratio be anything more than what would be deemed a fair ratio of insurance on government paper?

The New York papers are discussing the redemption of the government currency, and talking of specie payments. They may as well be quiet. We shall have no return to specie payments in a hurry. It will be a good while before we have specie payments. Why should the government withdraw the legal tenders? We have had no currency of any kind so useful to the people; and the government pays no interest on it.

There is one part of the government debt a currency, (or whatever else it may be called,) which should be withdrawn at once. This is the compound interest notes. These amount in all to about $250,000,000, and ought to be taken in by substituting long bonds for these. There would then remain the legal tenders and the national currency, which would be $450,000,000. The entire amount of currency out would then not exceed $650,000,000; and it will be found it is not too much to do the business of the country comfortably. Why should every business man be straitened and the long credits be again resorted to, for no purpose but to say, we have reduced the currency? It will be paying dear for the whistle.

☞ There will be held at Cedar Rapids, Linn Co., Iowa, on the 27th inst., a grand railroad convention of the friends of North Missouri and Cedar Rapids, to adopt means by which to reunite the commercial interests of St. Louis and Iowa, and to further the completion of the North Missouri and Cedar Rapids Railroad.

Wisconsin.—About $200,000 have been invested in oil ventures by the capitalists of Madison.

La Crosse is now lighted by gas manufactured from petroleum. It is cheaper and produces a better light than coal-gas.

☞ The committee appointed by the stockholders of the Virginia Central Railroad Company to examine the condition of that road, publish a report of their observations. All the bridges have been fully repaired or entirely rebuilt, and are now in good condition. The tunnels are also in splendid order, and the general condition of the bed and track is much better than it has been for a long time. The track on the worn-out sections is being re-laid with new iron, and, altogether, the committee regard that road as, for some time to come, in good running order.

—The Michigan Central Railroad earned for the month of August, $413,501 21, against $346,781 36 in 1864; increase, $66,719 85.

The Tredegar Iron-works at Richmond have been leased by the United States to the owners, Joseph R. Anderson and his partners, who have commenced business again as iron manufacturers, these works being held by Government agents as confiscable property. A revenue is derived by renting them until proceedings under the confiscation act shall be determined.

The Late Strike in the Iron Trade.—The lamentable results of strikes are forcibly shown by the fact that the loss sustained by workmen, in Staffordshire alone, during the recent conflict between the masters and their hands, is estimated at £500,000; the loss to the miners being £200,000, and to the men engaged in the manufacture of iron £300,000. This is known but there is a vast amount of collateral loss, and consequent privation, which can never be estimated.

About.—$50,000 worth of defaced or worn-out fractional currency is destroyed each day, and its place supplied with new. The entire amount in circulation is upward of $21,000,000. No more three-cent notes are to be issued—the act of Congress prohibiting them—and the five-cent notes will also gradually be withdrawn.

The first iron column erected in Richmond since its evacuation was put up on July 22, at the large new store-house of the Messrs. Harvey, on Thirteenth and Cary streets. This column was cast at the Union Manufacturing Works of Richmond, and is a very neat piece of casting.

Railways in France.—The French Chamber of Commerce has just published the annual statistics of railways in France. According to this document it appears that 12,417 miles of railways were conceded in that country up to Jan. 1, 1865, and 8,113 miles opened for traffic. The fastest express train is that between Paris and Marseilles, which performs the distance (536 miles) at the average rate of 35.05 miles an hour.


# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.



TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI | 9:00 A. M. | 10:40 P. M. |
| HAMILTON | 9:57 " | 11:13 " |
| DAYTON | 11:30 " | 12:35 A. M. |
| SPRINGFIELD | 12:35 " | 1:45 " |
| URBANA | 1:40 P. M. | 2:15 " |
| GALLION | 5:25 " | 6:10 " |
| MANSFIELD | 6:50 " | 7:15 " |
| AKRON | 9:30 " | 10:00 " |
| RAVENNA | 10:05 " | 0:40 " |
| LEAVITTSBURG | 11:00 " | 11:40 " |
| GREENVILLE | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE | 1:20 " | 2:30 " |
| CORRY | 2:45 " | 3:55 " |
| Arrives SALAMANCA | 4:58 " | 2:55 " |
| NEW YORK | 10:30 P. M. | 1:00 " |
| BOSTON | 2:30 " | 8:05 A. M. |
| PITTSBURGH | 2:20 A. M. | 3:20 P. M. |
| HARRISBURG | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA | 5:35 " | 6:55 " |
| BALTIMORE | 5:45 " | 7:00 " |
| WASHINGTON CITY | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for all Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. Fuller, Gen'l Ticket Agt. D. McLaren

J. P. Sarver, Chas. Cook, } Passenger Agents

# COUPON AND LOCAL TICKETS!

CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

CONSECUTIVELY NUMBERED

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD


## RAILROAD OFFICES AND AGENTS.

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St.

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord, General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A. B. Waters, Freight and Ticket Agent, Cor. Third and Walnut.

**Ohio & Mississippi.**

W. E. Bruce, Freight and Ticket Agent, Gazette Building, 82 West Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J. R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg, Contracting Agent, Vine St. under Burnett House
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent, " " "

**Central Ohio & Pittsburg, Columbus and Cincinnati.**

James E Shields, General Agent, No. 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C. Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No 4 Merchants' Exchange.

**Erie Railway.**

A. J. Day, S. W. Passenger Agent, No. 4 Merchants' Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants' Exchange.

**Hannibal & St. Joseph.**

J W. Burch, General Eastern Agent, No. 2 Burnett House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burne House.

**New York Central.**

G. B. Gibson, S. W. Passenger Agent. W. H. Page Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Pittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent, No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

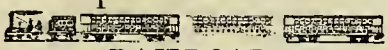
**Covington and Lexington.**

Depot in Covington.

Best Route to St. Louis and Chicago

**MONDAY, OCT. 31.**

## Indianapolis and Cincinnati



## RAILROAD.

THREE THROUGH TRAINS DAILY

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A M |
| Springfield and St Joe Express.. | 1:00 P. M. | 9:?7 P. M. |
| St. Louis and Chicago Express... | 10: 0 P. M. | 5:30 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt

---

## BENJ. H. LATROBE AND C. H. LATROBE.

## CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

**LAW BUILDINGS,**

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also, the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

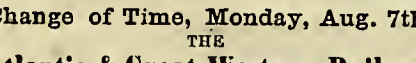
J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

---

**Change of Time, Monday, Aug. 7th.**

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:?0 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

---

## *STEAMSHIP COMPANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | | |
|---|---|---|
| WASHINGTON.... | .... | 3,204 tuns, 900 horse-power. |
| LAFAYETTE | ..... | 3,204 tuns, 900 horse-power. |
| EUROPE | ..... | 3,254 tuns, 900 horse power. |
| FRANCE | ..... | (afloat), 900 horse power. |
| NAPOLEON III | ..... | (afloat), 11,60 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine.... $70 or $80.

Payable in gold, or its equivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to

GEORGE MACKENZIE, Agent.
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

---

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building)..... | 3,412..... | ——— |
| ENGLAND (now building).. | 3,430..... | ——— |
| SCOTLAND (now building) | 3,430..... | ——— |
| ERIN..... | 3,310..... | Grace. |
| HELVETIA ..... | 3,315..... | Prowse. |
| PENNSYLVANIA ..... | 2,872..... | Grogan. |
| VIRGINIA..... | 2,872..... | Lewis. |
| LOUISIANA..... | 2,166..... | Axplett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to

WILLIAMS & GUION, No. 71 Wall street.

For steerage passage apply to

640* WILLIAMS & GUION, No. 29 Broadway.

---

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN..... | $90 00 | STEERAGE..... | $30 00 |
| First Cabin to London.. | 95 00 | Steerage to London.. | 34 00 |
| First Cabin to Paris.... | 105 00 | Steerage to Paris.... | 40 00 |
| First Cabin to Hamburg | 100 00 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

---

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR ..... 2,595 65-95 tuns.
WISLIAM R. BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge.

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to

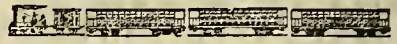
640* JAMES A. RAYNOR, No. 10 Barclay street.

---

## CENTRAL RAILROAD

—OF—

## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:?0 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

---

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twedty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.90; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.) 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

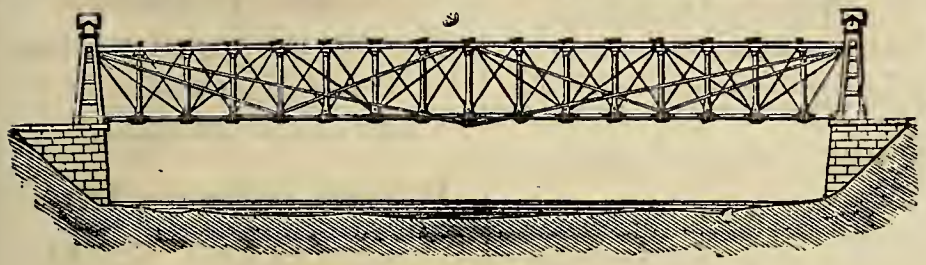
JAMES H. HOYT, Superintendent.

---

NEW-YORK AND HARLEM RAILROAD Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York, Brooklyn. Baggage checked from the residence points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, **FINK'S PATENT IRON BRIDGE**, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use. requires no repairs, and no adjustment, but is perfectly adjustable.

**For plans and particulars, apply to**

mar 4, '62 1y. **Letter Box, 1892.** **C. J. SCHULTZ, Pittsburgh, Pa.**

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS O

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

**CINCINNATI.**

**BRIDGE BOLTS,** Rivets [illegible] Bolts, Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y I

---

**KNOX & SHAIN,**

**Engineering and Telegraphic**

INSTRUMENT MAKERS.

**PHILADELPHIA.**

---

## JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL.

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

Manufacturers, Importers & Dealers

—IN—

**RAILROAD, CAR,**

—AND—

**MACHINE SHOP**

**SUPPLIES,**

—AND—

**MACHINERY OF EVERY DESCRIPSION**

**47 West Front Street, Cincinnati.**

PERKIN LIVINGSTON & POST

---

RAILWAY SPRINGS.

**FREIGHT**

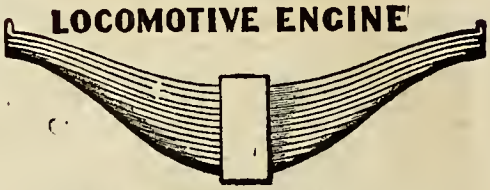




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs teated to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

**W. M. F. HEWSON,**

## STOCK BROKER,

**No. 21 West Third Street,**

**CINCINNATI.**

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by w running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged oy way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimor*
J. H. SULLIVAN, *Gen. Wes. Ag't. Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞ Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M. leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Buses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph, Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St, Louis and Cairo Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7.50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞ Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi, Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent.

W. D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front Sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Age t.

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Snt. 2 MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY.

MANUFACTUTERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods

**Bar of all Sizes,**

And all Forgings for Bailroad Machinery

**Lewistown, Mifflin Co., Penn**

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives,

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same, &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!

## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday exocpted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11.30 P M. night.

On Sundays, 4.30 A M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞ Through connections made for all points East a Wes

WM. BARNS SCOTT

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, SEPTEMBER 28, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| Morrow Accommodation | 5:20 P M. | 7:45 A. M. |
| *Atlantic & Great Western—* | | |
| Morning Express | 9:40 A. M. | 7:20 A. M. |
| Night Express | 10:50 P. M. | 6:30 P. M |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:30 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A M. | 9:45 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Toledo, Detroit and Huntsville | 5:00 P. M. | 12:50 P. M |
| Richmond and Chicago | 6:00 P. M. | 12:25 A. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | | 7:55 A. M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M. |
| Indianapolis & Cambridge City | 6:00 A M. | 10:05 P. M. |
| " " " | 4:30 P. M. | 12:25 P. M. |
| Eastern Night Express | 10:50 P. M. | 7:50 A M |
| Mail and Express | 9:40 A. M. | 6:30 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Springfield and St. Joe Express. | 1:00 P. M. | 5:07 P. M. |
| St. Louis and Chicago Express | 10:00 P. M. | 5:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 5:15 P. M. | 8:20 A. M. |
| Harrison Accommodation | 9:30 A. M. | 8:40 P. M. |
| Chicago and St. Louis Express | 7:15 A. M. | 9:00 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 6:00 A. M. | 10:00 P M. |
| Connersville, Cambridge City & Indianapolis Express | 4:00 P. M. | 12:25 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 7:45 A M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:12 P. M. |
| Evening Express | 2:35 P. M. | 6:02 A. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton. Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## ANNUAL STATEMENT OF THE TRADE AND COMMERCE OF CINCINNATI.

We have before us the annual statement of the Chamber of Commerce, prepared by Mr. William Smith. This is always an interesting document, but particularly so at this time, when the war has so changed the economical and commercial relations of the country, that it is difficult to ascertain the exact state of the trade and productions of the country. This statement gives us the *quantities* of the trade of Cincinnati, and if we reduce prices to gold, we shall have the relative *values*. We can not, therefore, mistake the true results. Taken as a whole, the commerce of Cincinnati for the year 1864–'5 has been prosperous and increasing. The following remarks in the report are correct.

During the year, gold, as shown by our table given below, fluctuated greatly, but gradually declined from 141 premium, which was the rate at the elose of August, 1864, to 28 premium, which it reached in May, 1865. This caused a large decline in the prices of all kinds of merchandise and produce, and resulted in heavy losses; but owing to the great wealth which had accumulated in the hands of merchants the two previous years, these losses, though large, did not lead to disastrous results, and but few failures took place. A system commenced two years ago, and which became general the past year, of buying imported goods at gold prices, and engaging to pay for them in gold, enabled our merchants to guard against the losses consequent upon the decline of gold with vastly greater facility and success than they could have done by making forced sales of goods, and in this way, the losses, otherwise inevitable, were averted to a great extent. But the appreciation of the currency, on the other hand, virtually increased the wealth of those who held it, and, if we may use the expression, solidified their money.

The losses, in Cincinnati, by fluctuation of currency were very small. Since 1862, the profits of trade in Cincinnati have been immense. The Government, too, has had an immense deal of work done in this city. Thousands have been employed in the clothing business; in building gunboats; in the carrying business; and the general trade has been good. Many of the merchants engaged in clothing and dry goods have built fine and expensive stores and dwelling houses, and these give tangible proof that they have made large profits.

There is no real need of losing, by the fluctuations of the currency, if merchants would make a rule of adopting the gold standard in all their transactions. A general view of the amount of trade is given in the following tables.

The total values of the leading articles imported and exported the past year and for the previous ten years, compare as follows:

| | Imports. | Exports. |
|---|---|---|
| 1854–5 | $67,501,341 | $38,777,394 |
| 1855–6 | 75,295,901 | 50,808,146 |
| 1856–7 | 77,950,146 | 55,642,171 |
| 1857–8 | 83,644,747 | 52,906.506 |
| 1858–9 | 94,213,247 | 66,007,707 |
| 1859–60 | 103,347,216 | 77,037,188 |
| 1860–1 | 90,198,136 | 67,023,126 |
| 1461–2 | 103.292,893 | 76,449,862 |
| 1862–3 | 144,159,213 | 102,397,171 |
| 1863–4 | 389,790,537 | 239,079,825 |
| 1864–5 | 397,552,397 | 293,730,317 |

It will be seen that the value of both the imports and exports, the past year, fall far short of that of the previous year, which, it is hardly necessary to say, is owing in chief to the general decline in prices. That there has been a large increase in the value of the commerce the last ten years, is seen by reducing the value the past year to a gold basis, and it will be found that it vastly exceeds what the value of the imports were before the war, even taking the highest figures, which were those of 1859–60. Now the average premium on gold, for the past year, was a fraction over 87 per cent., and by making the proper deduction, as shown by this premium, from the aggregate value of the imports as given above, it reduces it to $181,452,915, which is $78,105,699 more than the value of the imports in 1859–60, the largest of any year before the war.

In 1859–60, Imports (in gold)... $103,292,000
In 1864–5, " " ..... $181,452,000
Increase in five years..... 77 per cent.

An annual increase of 15 per cent. in the amount of trade in the city will more than double it, in seven years. We see that in seven years, the trade of Cincinnati has really more than doubled.

On the whole, business has not been very profitable, because of the decline in prices; but, notwithstanding, it has been satisfactory, and has been quite active. Indeed, general activity has prevailed in all departments. Our merchants have been constantly employed; our manufacturers have had a constant and pressing demand for their goods throughout the year, though the profits have not been as large as the previous year; and, notwithstanding, though the vast army demand for all war material has ceased, the commerce and trade of our city has not languished; the people are fully employed, and the price of labor remains high, and the demand for it exceeds the supply. The brave men who buckled on their armor and marched forth to fight for the nation, have returned and resumed again the peaceful pursuits of industry, and the places of those who fell in conflict are being filled by the hardy sons of toil from other lands. The population of the city is dense, even beyond what it was a year ago, and the price of real estate and the rent of houses are fully thirty per cent. greater than they were in August, 1864.

The profits of trade last year may not have been as large as the year before; they were, nevertheless, large enough, and taken as a whole, the profits of three years have been very large.

The following table shows the whole number, with the tonnage, of steamboats and barges, built at this port for each of the last eighteen years:

| | NUMBER. | TONNAGE. |
|---|---|---|
| 1847-'48 | 29 | 10,233 |
| 1848-'49 | 23 | 7,281 |
| 1849-'50 | 16 | 4,560 |
| 1850-'51 | 31 | 8,206 |
| 1851-'52 | 33 | 8,896 |
| 1852-'54 | 29 | 10,252 |
| 1853-'54 | 31 | 9,868 |
| 1854-'55 | 27 | 8,698 |
| 1855-'56 | 33 | 11,526 |
| 1856-'57 | 34 | 10,600 |
| 1857-'58 | 14 | 5,334 |
| 1858-'59 | 11 | 3,735 |
| 1859-'60 | 28 | 6,613 |
| 1860-'61 | 11 | 3,327 |
| 1861-'62 | 4 | 1,745 |
| 1862-'63 | 43 | 12,590 |
| 1863-'64 | 62 | 20,117 |
| 1864-'65 | 44 | 10,877 |

Thus ship-building, it will be observed, was greater than in any year, but three. The ship-building of 1863-'64 was increased by the building of several large Government vessels. At present there is little ship-building; but the commeree of the Ohio is very active, and probably will be enlarged hereafter actively.

The following table shows the whole number of steamboats and barges which run between this and other ports each of the last fifteen years, with their tonnage:

| | NUMBER. | TONNAGE. |
|---|---|---|
| 1850-'51 | 283 | 40,274 |
| 1851-'52 | 203 | 60,542 |
| 1852-'53 | 298 | 76,647 |
| 1853-'54 | 314 | 80,266 |
| 1854-'55 | 318 | 80,874 |
| 1855-'56 | 365 | 92,401 |
| 1856-'57 | 357 | 85,453 |
| 1857-'58 | 319 | 71,483 |
| 1858-'59 | 327 | 73,222 |
| 1859-'60 | 338 | 71,642 |
| 1860-'61 | 318 | 73,885 |
| 1861-'62 | 225 | 52,512 |
| 1862-'63 | 349 | 71,725 |
| 1863-'64 | 435 | 92,742 |
| 1864-'65 | 446 | 91,686 |

The following table shows the amount of arrivals of steamboats at this port for each of the past fifteen years:

| | |
|---|---|
| 1849-'50 | 3,653 |
| 1850-'51 | 3,698 |
| 1851-'52 | 3,475 |
| 1852-'53 | 4,058 |
| 1853-'54 | 3,887 |
| 1854-'55 | 2,845 |
| 1855-'56 | 2,796 |
| 1856-'57 | 2,703 |
| 1857-'58 | 3,168 |
| 1858-'59 | 3,106 |
| 1859-'60 | 2,928 |
| 1860-'61 | 2,714 |
| 1861-'62 | 2,868 |
| 1862-'63 | 2,206 |
| 1863-'64 | 2,936 |
| 1864-'65 | 3,490 |

The tonnage is greater than in any year except two—1863-'64 and 1855-'56. The *arrivals* are greater than in either of the last six years. In regard to particular branches of trade, the following table in regard to whisky is instructive.

The following were the annual imports and exports, for nineteen years, each year ending August 31st:

| | Imports. brls. | Exports. brls. |
|---|---|---|
| 1846 | 178,336 | 133,220 |
| 1847 | 184,639 | 183,928 |
| 1848 | 170,436 | 186,509 |
| 1849 | 165,419 | 136,911 |
| 1850 | 186,678 | 179,540 |
| 1851 | 344,047 | 231,324 |
| 1852 | 319.488 | 276,124 |
| 1853 | 327,110 | 257,616 |
| 1854 | 319,245 | 249,612 |
| 1855 | 305,965 | 243 551 |
| 1856 | 428,001 | 352,434 |
| 1857 | 531,873 | 361,889 |
| 1858 | 411,299 | 268,226 |
| 1859 | 382,412 | 305,889 |
| 1860 | 433,168 | 389,310 |
| 1861 | 381,763 | 309,939 |
| 1862 | 429,036 | 238,316 |
| 1863 | 160,858 | 162,009 |
| 1864 | 319,068 | 210,410 |
| 1865 | 70,700 | 114,769 |

This sudden falling off in the amount of this article entering into commerce is in consequence of the great blunder Congress made in *not taxing whisky on hand*, and *giving notice of a future time of tax*. The consequence is, that the distillers made as much whisky as they possibly could, and *withdrew their stocks on hand*, to get the advanced price. While this stock is selling off, scarcely any whisky will be made. Thus Congress did a great wrong to the country and the government.

The following is a view of the pork packing business, which in the last three years has been attended with extraordinary vicissitudes.

There was a general dread of the risk involved, in the purchase of large stocks of pork with the liability to be compelled to hold them pending a probable large decline in the price of gold. These considerations made our packers timid; and the result was, an unusual large amount was packed on commission; for rather than submit to prices the packers were disposed to pay, drovers and farmers had their hogs packed on their own account. The certainty of a short crop, which was manifest from the onset, made farmers and drovers confident, and this confidence increased as the season progressed, because the developments made, all tended to show a deficiency even greater than had been first supposed.

We believe a larger proportion of the product of the hog was packed in barrels than usual. But a small amount was put up for the English market, not exceeding 8,000 boxes of all kinds, which was owing to the high prices and the great uncertainty regarding the future course of the gold market. The whole number of hogs packed in this city, as returned by the packers was 350,600, which was about 20,000 less than the packing of the previous year, and 258,000 less than that of 1862-'63. The following table shows the number of hogs packed in this city each of the last thirty-seven years:

| Years. | No. | Years. | No. |
|---|---|---|---|
| 1833 | 85,000 | 1849 | 410,000 |
| 1834 | 123,000 | 1850 | 393,000 |
| 1835 | 162,000 | 1851 | 334,000 |
| 1836 | 123,000 | 1852 | 352,000 |
| 1837 | 103,000 | 1853 | 361,000 |
| 1838 | 182,000 | 1854 | 421,000 |
| 1839 | 190,000 | 1855 | 355.786 |
| 1840 | 95,000 | 1856 | 405,396 |
| 1841 | 160,000 | 1857 | 344 512 |
| 1842 | 220,000 | 1858 | 446,677 |
| 1843 | 250,000 | 1859 | 382,826 |
| 1844 | 240,000 | 1860 | 434,599 |
| 1845 | 196,000 | 1861 | 433,799 |
| 1846 | 205,000 | 1862 | 474,467 |
| 1847 | 250,000 | 1863 | 608,457 |
| 1848 | 475,000 | 1864 | 370,623 |
| | | 1865 | 350,600 |

In regard to the future, we are convinced that the year 1865-'66 will be, in Cincinnati, one of extraordinary commercial prosperity What Cincinnati now wants is *more dwelling-houses*. The population is now exceedingly dense; and it will soon be impossible to do much more business, without places to live in. For some years to come, *rents* will be high and afford fair prospects to builders.

## RAILROADS.

We are glad to see that the Grand Rapids and Indiana Railroad is likely to be finished. It is in active progress. This road, it will be remembered, connects (ultimately) with Makinaw, having a grant of land from Congress for that purpose. It will be seen from the paragraph below, that efforts are now making to complete its connections through Indiana, and Ohio. We have no doubt, that the road, we several years since advocated so strongly, from Cincinnati to Makinaw, will now be in course of successful progress.

A spirited meeting was held in Fort Wayne, Ind., on the 13th inst., to further the railway connection of the city of Richmond, Ind., with Saginaw, Mich., by the Grand Rapids & Indiana road. The Board of Directors of the Fort Wayne road on the 14th inst., authorized their President to open negotiations with the Grand Rapids & Indiana and Eaton & Hamilton roads, for consolidation of the companies along the whole line, or for an equitable running arrangement.

Leavenworth and Fort Gibson R. R.—Six counties along the line of the Leavenworth, Lawrence & Fort Gibson Railroad have voted $875,000 toward its construction. One county more is expected to make the sum a round million. It is expected to realize $250,000 from land given the State for internal improvements, and then there are ten sections to the mile which have been granted to the company.

The Placerville Railroad *vs.* Central Pacific.—The *Mountain Democrat*, published at Placerville, comes out on Railroad matters, and speaking of their present prospects, in an article August 19th, it asks the sympathy of the new owners of the road.

"The Central Pacific Railroad Company has purchased a controlling interest of the Sacramento Valley Railroad, which extends from Freeport and Sacramento towards this city. The San Francisco *Bulletin* says: 'This purchase, it is understood stops the further

extension of the Placerville road in the direction of Wasboc, and leaves the Stanford line without a competitor to stimulate the early completion of that important work.' The Sacramento Valley and Placerville road, running from Folsom to Shingle Springs, has no rolling stock of its own. It is worked by the rolling stock of the road purchased by the Central Pacific Railroad Company; and we are now completely at the mercy of that Company. It can, if it pleases, render our road valueless; but this would be unjust and so obviously against its own interests, that we believe it will do nothing of the kind. We are strengthened in this belief by the comments of the Sacramento *Union*, which says: 'Placerville may soon congratulate itself upon having railway communication with a navigable stream at Sacramento.' We are in the dark as to the intentions of the Central Pacific Railroad Company and place little reliance in rumors; and we shall wait for further developments before venturing to express an opinion on the subject. It is idle to speculate and useless to complain. We are powerless; we are in the hands of the Pacific Railroad Company and have no immediate remedy. Let us hope that Stanford, Crocker & Co. will not take advantage of our apparently helpless condition to treat us ungenerously and unjustly. They are shrewd business men and may find it to their advantage to assist us."

Now we see how the opponents of the Pacific Railroad feel. One thing is certain, the Directors of the Central Pacific Railroad can afford to be *magnanimous*, and they know too well their own interest, not to be generous. This great corporation have over seven million dollars at their credit in New York, and coffers full here; the work is progressing triumphantly, and soon another million will be added to their means. They now control all the railroad in Sacramento county.—*California Farmer.*

---

Central Pacific Railroad.—This glorious enterprise is now beyond the reach of any single or combined association of its enemies. With an overflowing treasury, with the control of all the roads that were opposed to this mighty enterprise with everybody in its favor, save *croakers*, the able and skillful managers, who have piloted their ship through all the stormy seas of opposition and competition, have now clear skies, plain sailing, and a glorious haven of prosperity before them. They have more than fulfilled every promise they have ever made, and can now rest upon the honor they truly deserve.—*Cal. Farmer.*

Better not rest too long, but push ahead the work and let us have the road built. We have been working a great many years for this enterprise, and it has but just got started. We desire to see it it finished for more reasons than one; therefore we repeat, gentlemen, don't rest too long.

---

In repairing a mail car in Galesburg, Illinois, lately, the foreman of car repairs of the Chicago, Burlington and Quincy Railroad found one hundred and twenty letters and circulars, which had fallen down behind the mail boxes of the car. These letters had been accumulating for a long time. Some were six years old.

## FLAX AND SEED.

Flax is an article of very slow growth in the United States; but, there can be no doubt, it will hereafter grow more rapidly; and in fact, become a great staple. Cotton will never again be as cheap as it has been. Cotton cloths rate much higher, and the temptation to manufacture, and use fancy fabrics of mixed linen and cotton, will be great, and to consume such products in large amount and variety, and manufacture the materials ourselves. The following is a table of flax seed raised in this country, of which one half is raised in Ohio.

As we have before remarked, there can be little doubt that since the census was taken, there has been considerable increase in the growth of flax; but making full allowance for this probable increase, the production of flax in the United States, with a climate admirably adapted for its growth, is exceedingly small. The principal cause of this is doubtless owing to the high price of labor, which renders the preparation of the crop more expensive than it is in other countries from which our imports of flax are derived. If the machines recently introduced for dressing flax shall prove as efficient as present experience indicates, the production of flax, stimulated by the high price of cotton, will greatly increase.

*Bushels of flax-seed produced in the United States in* 1860.

| STATES. | BUSHELS. |
|---|---|
| Alabama | 68 |
| Arkansas | 545 |
| California | ... |
| Connecticut | 109 |
| Delaware | 2,126 |
| Florida | ... |
| Georgia | 96 |
| Illinois | 8,670 |
| Indiana | 119,420 |
| Iowa | 5,921 |
| Kansas | 11 |
| Kentucky | 28,875 |
| Louisiana | ... |
| Maine | 419 |
| Maryland | 1,570 |
| Massachusetts | 7 |
| Michigan | 341 |
| Minnesota | 118 |
| Mississippi | 3 |
| Missouri | 4,656 |
| New Hampshire | 30 |
| New Jersey | 3,241 |
| New York | 56,991 |
| North Carolina | 20,008 |
| Ohio | 242,420 |
| Oregon | 6 |
| Pennsylvania | 24,198 |
| Rhode Island | ... |
| South Carolina | 313 |
| Tennessee | 9,362 |
| Texas | ... |
| Vermont | 331 |
| Virginia | 32,691 |
| Wisconsin | 4,256 |
| Total, States | 566,802 |
| TERRITORIES. | |
| District of Columbia | ... |
| Dakota | ... |
| Nebraska | 2 |
| Nevada | ... |
| New Mexico | ... |
| Utah | 33 |
| Washington | 30 |
| Total, Territories | 65 |
| Aggregate | 566,867 |

We have not space to go into a detailed examination of the production of flax-seed in the different sections. We may remark, however, that Ohio produces more flax seed than any other State. Indiana stands next.

The following observations on flax seed are from the *Cincinnati Price Current:*

Linseed Oil and Flax-seed.—The falling off in the consumption of linseed oil in the West diminished the receipts of flax-seed at this place, together with the fact that the crushers succeeded in giving out less seed in 1864 than previously, owing to the desire on the part of farmers to have the entire control of their crops; but the crop was a fair one, nevertheless, in the West, and was taken largely by Eastern crushers. The cultivation of the seed has increased largely during the last four years, under the operation of high prices, and so extensively has domestic seed been used in making oil, by crushers in the Eastern cities that the imports of foreign seed have fallen off over one-half. As we had occasion to notice in our last, the inducements to cultivate flax have been double—namely, the increased price of the seed and the demand for the fiber for paper-making and other uses—so that under these stimulating influences we may naturally look for a continued increase in the cultivation. It is true, flax is exhausting upon land, but this is of but little moment to the owners of rich bottom lands, and by rotating crops the effect will not be perceptible on such lands.

---

The Mississippi and Tennessee Railroad.—The work on the Mississippi & Tennessee Railroad is being pushed forward with the most gratifying celerity. The steam trains are now running from Grenada sixty-eight miles in this direction to Hickahala, and on this end of the road to a distance of thirty-eight miles from Memphis.

The two and a half miles of the track at this end of the road, and coming into Memphis, that was torn up, has all been relaid, and will be in order for the running of the cars in a day or two. Bridges are now being built at Hickahala and Coldwater, so that the break in the road may be entirely closed. The contracts for building bridges over Yallobusha at Grenada, and over Tallahatchie near Panola, have been given over to McNairy, Chaffich & Co., of Cleveland, Ohio.

When the road is completed, it will, it is supposed, be the most important avenue of trade that Memphis will have, as it will pass through a country of unsurpassed fertility. The work on this road has been hastened by Colonel Leib, having given to the railroad company the use of the colored soldiers under his command; the railroad company having thus had a large amount of work done for them.—*Memphis Bulletin.*

## MANUFACTURE OF LEATHER.

BY DR. F. CRACE CALVERT.

*Currying.*—The objects in view in currying leather are several: to give it elasticity — to render it nearly impermeable—to impart to it a black or other color, and lastly, to reduce it to uniform thickness. These colors are imparted by the following processes:—After the leather obtained from hides, or the thicker qualities of skins, has been damped, it is placed on a stone surface and energetically rubbed—first with a stone, then with a special kind of knife called a slicker, and lastly with a hard brush. The leather is then ready to be stuffed or dubbed which consists in covering it on the fleshy side with tallow, and hanging it in a moderately warm room; and as the water contained in the leather evaporates, the fatty matter penetrates into the substance of the leather and replaces it. The dubbing process is then repeated on the other side of the leather, which is now ready to be softened and rendered flexible, which is effected by rubbing it with a tool called a pummel. The leather then undergoes the last mechanical operation, which reduces it to uniformity of thickness by shaving off the inequalities of its surface by means of a peculiar shaped knife called a slicker. The greatest part of the curried leather is blackened on the grain side by rubbing it with grease or lamp-black and lastly brushing it over with a mixture of grease and glue. I believe that some kinds of curried leather are dyed by a purely chemical process, in rubbing the tanned skin, first with iron liquor, and then with a solution of gall-nuts or other tanning substance. The most tedious of the foregoing processes is that of dubbing, which has been greatly improved of late years by the Americans. The scoured skins are placed in a large revolving drum, of ten or twelve feet diameter, and lined inside with wooden pegs. A certain quantity of tallow is then introduced and the whole set in motion, and whilst the hides are thus tossed about, a current of warm air is passed through the drums, which carries off the moisture and allows the grease to penetrate the hide. By this means thick hide leather can be stuffed in four or five days.

*Fancy Leathers.* — Allow me now to give you a slight insight into the methods of preparing various fancy leathers, such as Morocco, Russia enamelled, tawed, or kid leather, used for soldier's belts, gloves, &c., and, lastly, oiled leathers used for wash-leather, gloves, &c. Until the middle of the eighteenth century, Morocco leather was wholly imported from that country, for it was in 1735 that the first Morocco works were established in Paris, and similar manufactories were soon set up in various parts of the continent and in this country. The process by which Morocco leather is prepared is as follows: The goat and sheep skins, which are especially used for this branch of manufacture, are softened, fleshed, unhaired, and raised or swelled by methods similar to those already described, but one essential element of success in this kind of leather lies in the perfect removal of all lime from the skins, which is effected by plunging the well washed skins in a bath of bran or rye flour, which has been allowed to enter into a state of fermentation. The result is, that the lactic and acetic acids generated by fermentation of the amylaceous substances combine with the lime and remove it from the skins. The other essential point is the mode of tanning the skins. Each skin is sewn so as to form a bag, and filled, through a small opening, with a strong decoction of sumac, and after the aperture has been closed, the skins are thrown into a large vat containing also a decoction of the same material. After several hours they are taken out, emptied, and the operation is repeated. To render these skins ready for commerce it is necessary to wash, clean and dry them. The latter operation was formerly tedious, and required great skill, but since the introduction of tar colors, the affinity of which for animal matter is so great, it has become comparatively easy. The skins, after they are dyed, are oiled, slightly curried, and the peculiar grain, characteristic of Morocco leather, is imparted to it by means of grooved balls or rollers. There are two inferior kinds of Morocco leather manufactured, viz: those called *roan*, prepared in a similar way to Morocco, but not grained, and *skivers*, also prepared in the same manner, but from split sheep skins.

I owe to the kindness of Mr. Warren De la Rue the beautiful specimens of leather before me, which will enable you to appreciate the various qualities of these interesting productions.

*Russia Leather.* — The great esteem in which this leather is held is owing to its extreme softness and strength, its impermeability and resistance to mildew, which latter property is imparted to it by the use of a peculiar oil in its currying, that is birch-tree oil, the odor of which is well-known as a distinguishing feature of Russia leather. As to its preparation I will merely state that it is very similar to that of Morocco, with these differences, that hot solutions of willow bark are used instead of sumac; that it is generally dyed with saudal wood and a decoction of alum; and, lastly, as already stated, the birch-tree oil is used in currying it.

*Enamel Leather.*— This class of leather is usually prepared with calf and sheep skins tanned in the ordinary manner. They are dyed black by rubbing them over with a decoction of logwood, and then iron liquor or acetate of iron. The leather is softened with a little oil, and is ready to receive a varnish, which is applied by means of a brush, and composed of bitumen of Judea, copal varnish, oil varnish, turpentine, and boiled oil.

*Tawed or Kid Leathers.*—The manufacture of this class of leathers differs entirely from those already described, as their preservative qualities are imparted by quite different substances from those used with other leathers, the preservative action of the tanning being substituted by that of a mixture of alum and common salt. Let us examine together a few points connected with the production of this class of leather. One of the most interesting characteristics is the method of unhairing sheep, lamb and kid skins, after they have been well washed and fleshed on the beam. The old process of unhairing by smearing on the fleshy side with a milk of lime was improved by mixing with the lime a certain amount of orpiment, or sulphuret of arsenic, but Mr. Robert Warrington having ascertained that the rapid removal of hair in this case was not due to the arsenic, but to the formation of sulpburet of calcium, proposed, with great foresight, the following mixture as a substitute for the dangerous and poisonous substance called orpiment—viz: three parts of poly-sulphuret of sodium, ten parts of slacked lime, and ten parts of starch. The poly-sulphuret of sodium may be advantageously replaced by the poly-sulphuret of calcium. The skins, unhaired by any of these processes, are now ready to be placed in a bran or rye bath, as with Morocco leather, or in a weak solution of vitriol, to remove, as already stated, the lime. After the lime has been thoroughly removed from the skins, they are dipped in what is called the white bath, which is composed, for 100 skins, of 13 to 20 lbs. of alum, and 4 to 5 lbs. of chloride of sodium or common salt, and the skins are either worked slowly in this bath or introduced into a revolving cylinder to facilitate the penetration of the preservative agent, which, according to Berzelius, is chloride of aluminium resulting from the action of the chloride of sodium on the alum. When the manufacturer judges that the skins have been sufficiently impregnated with the above mixture, he introduces them into a bath composed of alum and salt in the same proportions, but to which is added 20 lbs of rye flour and 50 eggs for 100 skins. After remaining a few hours they are removed, and allowed to dry for about fifteen days, and are then softened by working them with a peculiar iron tool, and the white surface which characterizes that class of leather is communicated to them by stretching them on a frame and rubbing them with a pumice-stone. A large quantity of tawed leathers are also preserved retaining their hair, which is done by simply suppressing the unhairing and rubbing processes.

*Chamois, Wash, or Oiled Leather.* — This class of leathers are named from the fact that formerly they were exclusively produced from the skin of the chamois, but at the present day sheep, calf, and deer skins, and even split thin hides, are manufactured into this kind of leather. I should also state that the employment of this kind of leather has greatly decreased of late years, owing to the general substitution of woolen fabrics in articles of clothing. You will see by the following description that the preparation of this class of leather differs entirely from those previously detailed; the conversion of skins into leather, or from a substance subject to putrefaction to one free from that liability, being no longer affected by tanning, as in the case of hides, and Morocco and Russia leathers, or by the use of mineral salts, as in the case of tawed leathers, but by that of fatty matters, especially animal oils, such as sperm. The skins are prepared in the same manner as for tawed leathers, and then submitted to what is called the wrizing operation, which consists in rubbing the hair side of the skin with pumice stone and a blunt tool or knife, until the whole of the rough appearance is removed, and the skin has acquired a uniform thickness. They are then worked on the peg until the great excess of moisture has been wrung out, and plunged into the trough of a fulling mill to the action of the wooden hammers of which they are subjected until nearly dry. They are then placed on a table and oiled, and several of them, after being rolled together, are replaced in the trough of the fulling mill. When the oil has been thus worked into the substance of the skins, they are removed, exposed to the atmosphere, again oiled, and once more subjected to the fulling mill; after which they are placed in a moderately heated room for a day or two, the object of which is two-fold, viz: to facilitate the evaporation of water and the penetration of the oil, and to create a slight fermentation, by which the composition of certain of the organic substances have undergone such modification as to enable them to combine in a permanent manner with the fatty matters. These processes are repeated until the manufacturer deems the leather sufficiently prepared to be fit to undergo the following operations, viz: to be immersed for several hours in a caustic lye bath, to remove

the excess of oily matter, washed, and pegged. It is only necessary to stretch the leather on a table, then on a horse, and lastly between rollers, after which it is ready for the market. The ordinary buff color of these leathers is communicated by dipping them, previously to the finishing processes, into a weak solution of sumac. Before speaking of the further processes necessary to fit these leathers for the glove manufacturer, allow me to have the pleasure of describing that of Mr. C. A. Preller, whose mode of preparing leather is very interesting, owing to the rapidity with which he converts hides into leather, and also to the remarkable toughness which his leather possesses. To attain these desirable ends Mr. Preller proceeds as follows: The hides are washed, slightly limed, unhaired, fleshed and partially dried; they are then smeared with a mixture, made of fatty matters and rye flour, which having been prepared a few days previously has entered into fermentation, and which has so modified the fatty matters as to render them more susceptible of immediate absorption by the hide. I think that this feature of Mr. Preller's plan deserves the serious notice of all engaged in the manufacture of oiled leathers, as it appears to prove that fatty acids (or modified fatty matters) are better suited for combination with skins than neutral fats. The hides, with additional fatty matters, are then introduced into the large American drums, previously noticed in speaking of currying, and after four days they are removed, washed in an alkaline fluid, worked with a pummel and slicker, and after being dried they are ready for market.

*Gloves* —The manufacture of this article is now a most important branch of trade, and is the means of giving employment to large numbers of people in several towns in this country as well as on the continent. To render the above-mentioned oiled leather sufficiently soft and pliable for gloves it is necessary to submit it to the following further operations: The chamois, kid, or other skins are rubbed over with a solution composed of one pound of soap, dissolved in half a gallon of water, to which is added 1½ lbs. of rapeseed oil and twenty yolks of eggs, or, what has been recently found to answer better than eggs, a quantity of the brains of animals reduced to pulp. The use of the latter two substances is extremely interesting in a scientific point of view, for they both contain a peculiar nitrogenated matter called vitalline, and special fatty matters called oleophosphoric and phosphoglyceric acids, which doubtless, by their peculiar composition, communicate to the skins those properties which characterize this class of leather. The skins are then washed and dyed in various colors, after which they are softened and rubbed with an instrument adapted to slightly raise the surface, and give it that well-known velvetty appearance belonging to glove skins. I shall not take up your time by entering into the details of dyeing these leathers, but describe the following process for bleaching them:

*Bleaching of Skins.* — The only process known until recently for imperfectly bleaching chamois and glove skins was that of submitting them to the influence of the fumes of sulphur in combustion or sulphurous acid, but latterly two modes of attaining that object have been proposed. The first consists in dipping skins for two days, in a weak solution of neutral hypochlorits of soda, washing, drying, and rubbing them with soap and oil. The second method is to dip glove skins into a solution of permanganate of potash, when they soon assume a brownish color, due to the liberation of the oxygen of the permanganate of potash, and the fixation of the hydrate of sesquioxide of manganese by the skin. The skins so acted on are washed and then dipped in a solution of sulphurous acid, which becomes converted into sulphuric acid by the action of the oxygen of the sesquioxide of manganese, and the protoxide thus produced unites with the sulphuric acid, which is soluble in water. The skins thus bleached when dressed are ready for market.

*Gilding of Leather.* — The usual mode of ornamenting leather with gold is to apply, in such parts as are desired, a thick solution of albumen, covering those parts with gold leaf, and applying a hot iron, when the albumen is coagulated and fixes the gold. This plan is objectionable when the goods are intended for shipment, and the following method, lately proposed, is far preferable: On the parts required to be gilt, a mixture, composed of five parts of copal and one of mastic, are spread; a gentle heat is applied, and when the resins are melted the gold leaf is spread upon them.

*Parchment.*—There are two distinct qualities of this valuable material, which has been used from time immemorial as a means of preserving records. The best quality is prepared from young lamb, kid, and goat skins, and the second quality from calf, wolf, ass, and sheep skins. To make parchment, the following is the process: The skins are stretched on strong rectangular frames, limed, unhaired, fleshed very carefully, and rubbed with pumice stone until the skins have acquired the proper thickness. They are then dried very carefully in the shade. — *London Chemical News.*

## BUFFALO & OIL CREEK RAILROAD

Oil Creek seems to be the source or suggestor of manifold enterprises. Here is another: For some time past the project of building a railroad to connect the Lake Shore with the Oil Creek road has been seriously entertained. Two routes are proposed—one leaving the Lake Shore at Westfield, and passing through Sherman and Clymer to Corry; the other leaving at Brocton and passing through Mayville to the same place. These routes have not been fully surveyed, and neither have been determined upon. A deep interest is felt in the enterprise by the people along the line contemplated, and delegations from Portland, Sherman, Harmony, Westfield, and other towns in Chautauqua county were in Buffalo last Tuesday, to consult with prominent railroad men and capitalists.

The road will be about forty miles in length. Sufficient stock having been subscribed, an organization was effected, under the name of "The Buffalo & Oil Creek Railroad Company."

☞ An European and North American Railway meeting was held at Bangor, Me., the other day, for the purpose of getting the hall rapidly in motion for a rail connection with the British Provinces.

☞ H. C. Atkink, the late acting Superintendent of the La Crosse & St. Paul Railroad, has been appointed Superintendent of the Winona & St. Paul Road.

## THE HICKS STEAM ENGINE.

From the days when Watt first made the steam engine a practical power, competent not only to perform labor which had hitherto depended on human or brute muscle, but even to achieve a thousand feats before undreamed of—from those days even until now, the thoughts and energies of thousands of scientific and practical men all over the civilized world have been directed to the improvement and development of the apparently inexhaustible powers of this wonderful agent.

In all these multifarious attempts, however differing and varied, one of two points has usually been aimed at, increased simplicity of construction, or greater economy in the use of steam.

Perhaps the greatest step which has been made of late years toward the attainment of the former of these objects, is in the construction adopted in what is called the "Hicks Engine," now on exhibition at No. 88 Liberty street in this city. By a peculiar arrangement of cylinders and steam passages, the inventor is enabled to dispense with a large part of what have heretofore been usually considered essential parts of every direct acting engine. Here is a direct acting, reciprocating piston engine, entirely destitute of either valves, valve rods, eccentrics, rock shafts, packing boxes, slides, cross heads, and even piston-rods. It is, so to speak, the mere skeleton of an engine, comprising essentially nothing but cylinders, pistons, connecting rods, shaft and crank. Four single acting pistons, working in four cylinders arranged in pairs, are connected to two cranks placed at right angles on one shaft. The steam is admitted directly into two of these cylinders, sometimes to act upon their own pistons, sometimes to be transmitted through them into the other two. By means of curiously contrived ports and passages in these pistons, corresponding to similar ports and passages in the walls of the cylinders, the steam is admitted into and exhausted from each one of the cylinders at every revolution of the engine, and so ingeniously are these ports arranged that each piston having performed its share in urging forward the revolution of the crank, immediately becomes a slide valve to govern the inlet and outlet of steam to its neighbor. At the same time every piston acts as a cut off to its own cylinder, stopping the supply of steam at half stroke, and allowing it to expand during the remainder of the stroke. Thus it will be seen how valves, valve-rods, eccentrics, etc., are at once dispensed with. Each piston is at once a piston and a balanced slide valve, and no other motion is required to determine the proper action of the steam than its own. There are other advantages attendant on Mr. Hicks' plan, scarcely less important to the practical engineer or manufacturer than the simplicity above stated. Each of the four pistons acting in succession at different points of the revolution of the shaft, the motion of the shaft can hardly fail to be uniform and continuous during the entire revolution, even without the aid of a balance-wheel. There are no dead points requiring to be overcome by momentum previously acquired. Again, all the cylinders, the bed plate and the bearings of the shaft are cast in a single piece, rendering it impossible when the engine is once fitted that it should ever get out of line, and all the working parts are inclosed in a perfectly tight case, protecting them free from the friction and wear of dust and dirt.

In economy of parts and cheapness of construction, it will be seen that the Hicks engine is a long step in advance of anything of the kind hitherto in use. Whether the other desideratum, of the greatest economy in the use of steam, has been as nearly attained by this form of construction, can only be demonstrated by the test of actual service. This will soon be applied, as the company who are the present owners of the patent are now engaged in building several engines of different sizes, which will speedily be put in operation in the vicinity of the city, and ere long the public will have an opportunity of determining the relative economy of the working of this and the ordinary construction of steam engines.—*New York Tribune, Sept.* 13.

## A NEW EXPLOSIVE SUBSTANCE.

Glycerine, as we all know, is the sweet principle of oil, and is extensively used for purposes of the toilet, but it has now received an application of rather an unexpected nature. *Galignani* states that in 1847, a pupil of M. Pelouze's, M. Sobrero, discovered that glycerine, when treated with nitric acid, was converted into a highly explosive substance, which he called nitro-glycerine. It is oily, heavier than water, soluble in alcohol and ether, and acts so powerfully on the nervous system that a single drop placed on the tip of the tongue will cause a violent headache that will last for several hours. This liquid seems to have been almost forgotten by chemists, and it is only now that Mr. Nable, a Swedish engineer, has succeeded in applying it to a very important branch of his art, namely, blasting. From a paper addressed by him to the Academy of Sciences, we learn that the chief advantage which this substance, composed of one part glycerine, and three of nitric acid, possesses, is that it requires a much smaller hole or chamber than gunpowder does, the strength of the latter being scarcely one-tenth of the former. Hence the miner's work, which, according to the hardness of the rock, represents from five to twenty times the price of gunpowder used, is so short that the cost of blasting is often reduced by fifty per cent. The process is very easy. If the chamber of the mine present fissures, it must first be lined with clay to make it water-tight; this done, the nitro-glycerine is poured in and water after it, which, being the lighter liquid, remains at the top. A slow match with a well charged percussion cap at one end, is then introduced into the nitro-glycerine. The mine may then be sprung by lighting the match, there being no need of tamping. On the 7th of June last, three experiments were made with this new compound in the open part of the tin mines of Altenburg, in Saxony. In one of these a chamber 34 millimetres in diameter was made perpendicularly in a dolomitic rock 60 feet in length, and at a distance of 14 feet from its extremity, which was nearly vertical. At a depth of eight feet a vault filled with clay was found, in consequence of which the bottom of the hole was tamped, leaving a depth of seven feet. One litter and a lot of nitro-glycerine was then poured in—it occupied five feet; a match and stopper were then applied as stated, and the mine sprung. The effect was so enormous as to produce a fissure fifty feet in length, another of twenty feet. The total effect has not yet been ascertained, because it will require several small blasts to break the blocks that have been partially detached by this.—*Stockholder.*

## CENTRAL PACIFIC RAILROAD.

This is one of the greatest enterprises of modern days. It is unequaled by any work, unless that of a railroad over the Alps, or some roads built by the British in India. It is the attempt to build a railroad where the summit of the line is nearly 8000 feet in altitude, over a country of sierras, whose face is as irregular as the surface of water where opposite tides meet. It is the line of road now advancing eastward from the Pacific. At the annual meeting of the stockholders on July 13th, the President, Leland Standford, reported that the financial problem which had been pressing upon them was solved, and the result was, abundant financial means to push forward the road to its utmost development. The assets then in possession of the Company, and those to be derived from the Government, were as follows: The act of Congress granting aid to the Railroad was beneficially amended at the last session, by allowing the Company to make their first-mortgage bonds payable in gold coin, both principal and interest. This will make their first-mortgage bonds among the most desirable securities, as they will be of the best to be offered in the market.

| | |
|---|---|
| The Company had on hand Placer and Sacramento County Bonds, (gold) eight per cent..... | $238,500 |
| Bonds on which California pays seven per cent. interest in gold..... | 1,475,000 |
| San Francisco County Bonds, (gold) seven per cent..... | 265,000 |
| United States Bonds, six per cent... | 1,258,000 |
| Making a total of..... | $3,236,500 |

On which the Company draws an annual interest of $216,360.

In addition to this, there will be due to the Company, on completion of the work to the station at Illinoistown, Government bonds amounting to $1,200,000; and which, in view of the speedy completion of that work, may be considered, for practical purposes, as assets immediately available..

Issuing first mortgage bonds, as authorized by act of Congress, though their issue would be limited to completed road by the middle of September, the yield would be from this source, $2,458,000.

Beside, the Company is authorized to issue first-mortgage bonds to the extent of one hundred miles of a completed line.

| | |
|---|---|
| Thus it will be seen that they have as assets, immediately available, without issuing first-mortgage bonds beyond road constructed, bonds on hand — first-mortgage bonds ..... | $2,458,000 |
| Government bonds on work nearly completed..... | 1,200,000 |
| Placer, Sacramento, and San Francisco County Bonds, and Bonds on which the State pays interest... | 3,236,500 |
| Making a total of..... | $6,804,500 |

No disposition has been made of the lands of the Company. Over 50,000 acres have been listed to the Company by the United States Land Office. As the road progresses, the land by improvement will yield returns in the shape of freight. A pine lumber region is now nearly reached.

The general business of the road is constantly increasing. The gross earnings during the month of June amount to $31,456. The local business is also daily increasing.

The question before the Company at its meeting, which was the most pressing, related to labor. Since January 1st, 1865, all the labor has been employed that could be obtained. During the first three months of the year the force averaged five hundred men; but the wet weather prevented labor more than half the time. Since then the weather has been more favorable, and the average force about two thousand. In July, the force reached twenty-five hundred in number, and was daily increasing. It was expected to reach five thousand men during the season. In July about two thousand of the laborers were Chinese.

The road has been completed to Clipper Gap, twelve miles above New Castle, and the next twelve is in such forward condition that the cars would be running by September 15th. There will then be in operation fifty-six miles of the Pacific road, and an elevation of 2448 feet be reached, or more than one-third of the entire elevation to be overcome in crossing the mountains. By the 1st of April next, it is expected to have the road completed to Dutch Flat, and much work done beyond that point. At the time of the next annual meeting, it is expected the road will be in operation to Crystal Lake, twenty-five miles above Dutch Flat, and within fifteen miles of the summit. Complete surveys have been made for this distance, and the work found to be of a more favorable character than had been anticipated.

There are three corps of engineers beyond Crystal Lake, and one of them beyond Donner Lake, eastwardly. It is considered to be important to commence the work of grading from Donner's Lake, eastwardly, and laying the track without waiting until the road can be constructed up to that point. By such a course, the road can be expected to reach Salt Lake in three years from July last. The President says: "It would be a matter of pride, if possible, to overcome the Sierras and reach Salt Lake, to greet our brethren of the East, upon their arrival there."—*Stockholder.*

## THE INTERCOLONIAL RAILWAY.

Mr. Sanford Fleming's report on the Intercolonial Railroad was recently laid on the table of the House, by the Provincial Secretary of Canada. It contains 114 pages, and there are besides 46 pages of appendix on the agricultural resources of the country through which the proposed railroad will pass, and two large colored maps showing the different routes reported upon. These are three in number, containing fifteen different lines, or variations of the route. The frontier route, the projected lines of which at one or more points touch or pass close to the United States; the central route, embracing lines projected to run through the interior at some distance from the frontier, as well as from the Gulf shore; and the Bay of Chaleur route, comprising those lines which verge upon the waters of the Gulf on that bay. The frontier route includes three lines, involving the construction of 401, 414, and 410 miles of road respectively. The central route embraces nine lines, in length respectively 435, 437, 452, 416, 458, 422, 435, 432, and 438 miles. The Bay of Chaleur route includes three lines of 496, 486 and 499 miles in length respectively. The number of miles of road necessary to connect River du Loup with St. John by these different routes is from 292 to 390 miles. The main difficulty of working the road is snow in winter, and Mr. Fleming, to overcome this obstacle, recommends, where woods exist, among which it is well known drifts do not take place, to pre-

serve a belt along the line, and in settled parts to plant spruce or pine; this he thinks would prevent heavy drifts. The difficulty of an ordinary snow-fall, which he estimates to he five feet on an average, he proposes to obviate hy building the road on an embankment throughout. In places where cuttings are necessary, these he would widen so as to allow wide ditches on either side of the track, which would be virtually on an embankment, from which it is always easy to remove snow. So constructed, he sees no reason why trains should be run between River du Loup and Halifax with greater regularity than on the Grand Trunk east of Montreal. With regard to the cost of the road, he estimates it at $20,635,000, about an average of $46,000 per mlle. That is the estimate for the whole line by the route surveyed last summer from River du Loup by way of River Toledi, Green River, and Gounamitz Valley, thence by Two Brooks Wapskehegan, the upper waters of Miramichi and Nashwaak hy the Keswick Valley and St. John river to opposite Fredrickton, thence by the head of Grand Lake and Chowan's Gulch to Apohaqui station. It embraces also the section from the New Brunswick Railway to Truro, in Nova Scotia. This appears to he the route Mr. Fleming most favors, though he makes no distinct preference Speaking of the commercial prospects of the Intercolonial, he alludes to the competition of a railway from Bangor to St. John. To counteract this, the line by the Bay of Chaleur offers special advantages. The entrance to the bay is as near Europe as Halifax, and several hundred miles nearer Montreal and all points west. The great Ship-pe-gan harhor, on the southerly side of the entrance to the Bay of Chaleur, is indicated as a good harhor. From this point to Liverpool by Belle Isle, the distance is 143 miles shorter than from Halifax. From Halifax to Toronto by the Intercolonial and Grand Trunk way, it is 394 miles less than hy the American routes.—*Railroad and Mining Journal.*

## AMERICAN SILK PRODUCTS.

Among the many articles which have recently attracted a more general attention and bid fair to become a business of immense proportions, is the manufacture of raw silk. This branch of American industrial effort has silently increased, and with such success, that the trade-mark aloue reveals to the purchaser the fact that he is buying American goods.

It is well known how proud are the French of their silk productions, and how important an item these have formed among their exports to this country. At present they are in trouble, for their best operatives are deserting their mills for the hetter wages which our manufacturers offer. The highest duty falls upon that department known as "piece silks," now for the first time manufactured in this country. Of these we have recently seen patters which would rival the best efforts of the looms of Lyons or Macclesfield. It is not impossible that we should cease to draw our supplies of these goods from a foreign market. The importation of sewing silks from Italy, whence were formerly received the best qualities, has long since ceased; of dress trimmings it has been seriously curtailed within the past eighteen months, and both helt and bonnet ribbons of home manufacture have to a very great extent entered the list of fashionable goods. The finest fabrics of Europe made only for its courts and the American market—the more elaborate dress goods upon which our best endeavors are now exerted, must with Yankee energy, and the hest of foreign workmen, he created here.

But there are two difficulties which the manufacturer in the United States has to encounter—the inducements for the workmen to seek the higher wages of the cotton mill, and the lack of the raw material. The first can be solved hy perseverance, and possihly hy a future reduction in the price of cotton fahrics. The latter—how to obtain a sufficiency of raw silk—is a problem which demands the attention of the dealer and the manufacturer.

During the last year the supply has heen most limited, in fact amounting to almost a famine. The worms of China, Italy and France have heen visited with an epidemic, which has thus far haffled the skill of the most experienced growers. The insect is seized with a species of cholera, just before the completion of the cocoon, and, ejecting its food from the stomach in an undigested form, immediately dies. The worms of Japan have thus far escaped the malady. Should it reach that country, also, our ladies would he restricted to the one silk dress which in former times indicated the wealth of the wearer.

For the origin of this disease various reasons are assigned. The most plausible is that it lies in the too great avarice of the growers. The mulherry tree is stimulated in its production of leaves; the object is attained, but the leaf lacks in nutritive quality what is gained in quantity. The poor worms, unahle to acquire strength from the given quantity which they can eat, give up the ghost, and their labor is lost when it is nearly perfected.

The culture of the silk worm has been attempted with varying success in America.

Many have reason to remember the speculation of 1830, and later, which engulphed so many fortunes. The *morus multicaulis* mania never found its equal until the days of the petroleum fever. But there are no climatic or other obstacles to the growth of the cocoon in the Middle or Southern States. The effort has failed hitherto, chiefly on account of the low price of the foreign article; at its present cost it would seem to be profitable. In California the enterprise is again started, but until we hear of positive success, we must continue to look to China and Japan for the relief of our constantly increasing wants.

We feel confident that our readers would he amply rewarded hy a visit to our silk factories. Those easiest of access are in Paterson, Newark and Yonkers. Should they desire a more extended trip, or in their next summer's ramhlings, seek to add instruction to pleasure, they can visit the charming old town of Northampton, pausing at Hartford and Manchester, where, under the energy of a single firm, are two of the largest mills in the country. Boston, too, possesses a number of looms in active operation; in fact, New England is now eugaged in filliug orders equal to the present means of supply. The field is ample for capital and enterprise, aud the manufacturer is receiving the wishes of the entire community for his success.—*Journal of Commerce.*

—The following is a comparative statement of earnings of the North Pennsylvania Railroad Company for the month of August:

| | |
|---|---|
| 1865 | $93,315 |
| 1864 | 74,282 |
| Increase | $19,033 |

—The Indianapolis & Cincinnati Railroad has declared a stock dividend of 16 per cent., payable Sept. 20.

## THE BRITISH COTTON TRADE.

Of the British cotton trade, the London *Times* of September 5 says:

Our imports have now reached nearly nine hundred million hundred weights, or nearly three quarters of what they were at the climax of the cotton trade in 1860; our exports are only six millions short of the amount in that famous year. But if the gross amount of the trade is recovering its former conditiou, nothing can be more remarkable than the revolution which has taken place in its course

In 1860 the United States sent us the enormous sum of 1,115 million hundred weights of cotton out of a total of 1,390 millions. In 1864, out of a total of 893 millions, the United States sent us only 14 millions, and India, which sent us in 1860 only 200 millions, sent us last year 500 millions. India, in fact, is now the principal source of the cotton supply, and occupies a place little inferior in proportion to that which was formerly occupied by the United States. Other countries, however, display the influence of the same stimulus.

An increase in the value of our imports from Egypt of from sixteen to nineteen millions sterling is due almost entirely to an increase in the cultivation of cotton. China has added 315,000 hundred weights, or more than three millions in value, to the amount of her importation; and, though the amount received from Japan is small, it has increased in the enormous ratio of 1,200 per cent. The high price of cotton has attracted from many countries the re exportation to our shores of the stocks they had imported for themselves, and this plant, which was thought so difficult to raise and so delicate that we could not endure the failure of our American supply, now comes to us probably from more parts of the world than any other article of commerce.

Smelting Iron with Gas.—Much attention is now being directed to an invention, described some time since in the London *Mining Journal*, due to Dr. Gurlt, and generally known as the gas-fuel method of smelting, by which the useful portions of the fuel are thoroughly utilized, while all impurities are left behind. The latter advantage is peculiarly applicable to iron and steel making, as the chief impurities in these metals are derived from the fuel. Dr. Gurlt exposes iron ore to a current of gas, of which a small proportion is burnt to give the necessary heat. A small exposure merely reduces, a longer carbonizes, so that either malleable iron, steel, or cast-iron can he obtained at will. By applying gas fuel to a reverberatory furnace, and blowing in air hy pipes over the bridge, a true blow pipe flame is obtained, hy which the highest heat possible is attained, and also, hy the regulation of the wind, the atmosphere of the furnace may he kept either neutral, oxidizing, or reducing at will. With such a furnace Dr. Gurlt hopes to melt steel in large quantities, without injury to its quality. The gas is obtaiued hy hurning the fuel in a close, deep fire-hox, hy means of a blast of air at the hottom.

J. J. Houston, General Freight Agent of the Pittshurg, Ft. Wayne & Chicago Railroad, has resigned. Wm. P. Shinn, Superintendent of the Eastern Division, has been appointed to fill the vacancy, and J. D. Layng takes the place of Mr. Shinn.

## MONETARY AND COMMERCIAL.

There has been nothing occur during the past week to excite the money market, so that in the absence of speculation the demand for money for the ordinary purposes of trade has been moderate, and readily met by bankers at 8 to 10 per cent. The demand for Exchange has, however, been in excess of the ordinary supply, and rates are firm at quotations:

| | Buying. | Selling. |
|---|---|---|
| New York | 50@75 prem. | 1-10 prem. |
| Philadelphia | 50@75 prem. | 1-10 prem. |
| Boston | 50@75 prem. | 1-10 prem. |
| Baltimore | 1-10 dis. | par. |
| Gold | 143 | 144¼@143¾ |
| Silver | 135@136 | 137@138 |

The New York gold market has not materially varied during the week, having had a range of only 1¼ cents, which is not more than sufficient to give interest to the traffic.

There has been a good deal of activity in all the departments of business and our merchants have no reasons to complain, as all are doing a satisfactory business. Dealers from the South are in the market, which adds to the general activity.

"Money," says the *Tribune* of Tuesday, "continues easy at 5@6 per cent, and brokers are unable to employ the offerings at the quotations. Commercial bills pass at 6½@7 per cent. for best, and 8@10 per cent. for second class. The bank statement shows quite moderate changes. There is a gain in legal tenders, and the figures in all departments indicate easy money.

"Gold-bearing Government Stocks are firm, and in demand. The 7-30's are quoted at 98¾@99⅜. The small notes are not in favor, and do not command within ½ per cent. of $500 and $1,000 notes. In Border State, little doing. Railway Shares are stronger, and they are steadily passing into the hands of buyers, confident that their current earnings make them the cheapest property to be had. The Western Stocks are in request. Rock Island and Michigan Southern were special favorites. The earnings of both these roads are larger, and on the Southern road, in excess of the managers' estimates.

"Judge Barnard has decided that the Michigan Southern Railroad is liable for dividends at 10 per cent per annum upon the guaranteed stock. The company, under one of its early charters, had the right to issue 'Construction Stock,' and pledge its earnings in payment of dividends.

"Since the decision was made, no steps have been taken by the company to contest it further."

The latest quotations are:

| | Bid. | Asked. |
|---|---|---|
| New York Central | 95⅛ | 95¼ |
| Erie | 88¼ | 88⅝ |
| Harlem | 109¼ | 109½ |
| Michigan Central | 111⅝ | 111⅞ |
| Michigan Southern | 110⅞ | 111 |
| Illinois Cen. Scrip | 66¼ | 96¼ |
| Cleveland & Pittsburg | 128½ | 129 |
| Cleveland & Toledo | 72⅞ | 73 |
| Rock Island | 107¼ | 107⅜ |
| North Western | 113½ | 113⅝ |
| North Western Pref. | 28 | 28⅛ |
| Fort Wayne | 62¼ | 62⅜ |
| Prairie du Chien | 99⅜ | 99½ |
| Toledo & Wabash | 45 | 54¾ |
| Chicago & Miss. C. | 28⅞ | 29 |
| Canton | 40 | 40¼ |
| Cumberland Coal | 45¾ | 45½ |
| Metropolitan M. C. | 12½ | 12¾ |
| Quicksilver | 48¼ | 48½ |
| American Coal | 71 | 72½ |
| Central Coal | 59¼ | 60 |

—The gross income of the Hartford & New Haven Railroad for the year ending August 21, 1865, is as follows:

| | | |
|---|---|---|
| From passengers | | $944,627 32 |
| From freight | | 456,742 62 |
| From rents, mails and expresses | | 58,111 30 |
| Total | | $1,459,461 31 |
| Expenses for repairs of track, bridges and equipment, and new structures, and all other current and incidental charges for operating the road | | $912,377 07 |
| Interest | $53,996 99 | |
| Taxes, State and National | 193,900 55 | 187,803 54 |
| Total | | $1,100,180 61 |
| Deducting expenses, interest and taxes from the gross earnings, the balance of net receipts is | | $359,530 70 |

The number of passengers carried during the year is 924,501, which is 68,136 more than during the previous year. The gross income exceeds that of 1863–4 by $167,404.36, chiefly derived from passengers. The expenses of the Company have been larger this year than last by $265,199 44, owing to the outlay for the bridge at Windsor Locks and other improvements, and to the advanced price of labor. The balance of net receipts, after deducting all expenses, is $97,795.08 less than last year.

—Annexed are the comparative earnings of the Chicago and Alton Railroad for the second week in September:

| | |
|---|---|
| 1865 | $104,764 |
| 1864 | 85,594 |
| Increase | $19,170 |

From January 1 to September 16:

| | |
|---|---|
| 1865 | $2,638,653 |
| 1864 | 1,567,131 |
| Increase | $1,072,522 |

—The Panama Railroad Company has declared a dividend of 4 per cent. upon the railroad earnings of the last three months, and of 2 per cent out of the earnings of its vessels. The Company has also declared a stock dividend of two (2) new shares for each five (5) old shares, and will in future pay quarterly dividends of 6 per cent. The earnings of the Company continue upon a large scale, and under the constant development of commerce on the west coast of South America, promise to show even better results than the past has given. For the stock 300 is bid and no sellers.—*Tribune.*

CINCINNATI SUSPENSON BRIDGE.—A series of supports for the foot bridge, for the use of the workmen, are being suspended from the wires lately stretched across the river.


# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.



TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | | Day Exp. | Night Exp. |
|---|---|---|---|
| Leaves | CINCINNATI | 9:00 A. M. | 10:40 P. M. |
| | HAMILTON | 9:57 " | 11:43 " |
| | DAYTON | 11:30 " | 12:55 A. M. |
| | SPRINGFIELD | 12:35 " | 1:45 " |
| | URBANA | 1:40 P. M. | 2:15 " |
| | GALLION | 5:25 " | 6:10 " |
| | MANSFIELD | 6:50 " | 7:15 " |
| | AKRON | 9:30 " | 10:00 " |
| | RAVENNA | 10:05 " | 0:40 " |
| | LEAVITTSBURG | 11:00 " | 11:30 " |
| | GREENVILLE | 12:15 A. M. | 1:00 P. M. |
| | MEADVILLE | 1:20 " | 2:30 " |
| | CORRY | 2:45 " | 3:55 " |
| Arrives | SALAMANCA | 4:58 " | 2:55 " |
| | NEW YORK | 10:30 P. M. | 1:00 " |
| | BOSTON | 2:30 " | 8:30 A. M. |
| | PITTSBURGH | 2:20 A. M. | 3:20 P. M. |
| | HARRISBURG | 1:30 P. M. | 2:45 A. M. |
| | PHILADELPHIA | 5:35 " | 6:55 " |
| | BALTIMORE | 5:45 " | 7:00 " |
| | WASHINGTON CITY | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

**Ample time is allowed, at all hours, for meals.**

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at Northeast corner of Broadway and Front streets, and at No. 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, G'n'l Ticket Agt. D. McLARE S
J. P. SARVER, } Passenger Agts
CHAS. COOK, }

# COUPON AND LOCAL TICKETS!

CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

CONSECUTIVELY NUMBERED

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD


## RAILROAD OFFICES AND AGENTS.

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St.

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord, General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A. B. Waters, Freight and Ticket Agent, Cor. Third and Walnut.

**Ohio & Mississippi**

W. E. Bruce. Freight and Ticket Agent, Gagette Building, 52 West Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J. R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg, Contracting Agent, Vine St. under Burnett House
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent. ", "

**Central Ohio & Pittsburg, Columbus and Cincinnati.**

James E. Shields, General Agent, No 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A. J. Day, S. W. Passenger Agent, No. 4 Merchants' Exchange.
G. G Cooke, Local Passeoger Agent, No. 4 Merchants' Exchange.

**Hannibal & St. Joseph.**

J. W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fonrth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burne House.

**New York Central.**

O. B Gibson S. W. Passenger Agent. W. H. Page Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Pittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.

Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

## Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:37 P. M. |
| St. Louis and Chicago Express... | 10: 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House. Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt.

---

BENJ. H. LATROBE AND C. H. LATROBE,

CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.

Through to Pittsburg without Change.

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.
J. J. HOUSTON, General Freight Agent.
my11 Pittsburg, Pa.

---

Change of Time. Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:30 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

---

## STEAMSHIP COMPANY.



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | | |
|---|---|---|
| WASHINGTON..... | 3,201 tuns, | 900 horse-power. |
| LAFAYETTE..... | 3,204 tuns, | 900 horse-power. |
| EUROPE..... | 3,254 tuns, | 900 horse power. |
| FRANCE..... | (afloat), | 900 horse power. |
| NAPOLEON III..... | (afloat), | 11,000 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its equivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

---

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building)..... | 3,412..... | ——— |
| ENGLAND (now building).. | 3,430..... | ——— |
| SCOTLAND (now building) | 3,430..... | ——— |
| ERIN..... | 3,310..... | Grace. |
| HELVETIA..... | 3,315..... | Prowse. |
| PENNSYLVANIA..... | 2,872..... | Grogan. |
| VIRGINIA..... | 2,872..... | Lewis. |
| LOUISIANA..... | 2,166..... | Appleton. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to

WILLIAMS & GUION, No. 71 Wall street.

For steerage passage apply to

640* WILLIAMS & GUION, No. 29 Broadway.

---

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN..... | $90 00 | STEERAGE..... | $30 00 |
| First Cabin to London.. | 95 00 | Steerage to London. | 34 00 |
| First Cabin to Paris.... | 105 00 | Steerage to Paris ... | 40 00 |
| First Cabin to Hamburg | 100 00 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

---

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR..... 2,595 65-95 tuns.
WISLIAM R. BELL..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge.

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
640* JAMES A. RAYNOR, No. 10 Barclay street.

---

## CENTRAL RAILROAD

—OF—

## NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,
Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at Nos. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

---

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15* (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

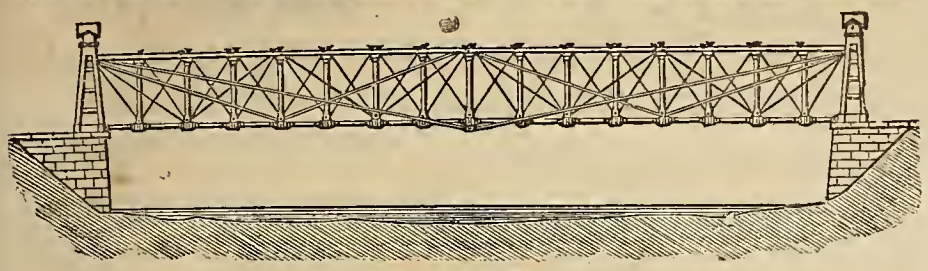
JAMES H. HOYT, Superintendent.

---

NEW-YORK AND HARLEM RAILROAD. Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York, Brooklyn. Baggage checked from the residence points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '63. 1y. Letter Box, 1292. C. J. SCHULTZ, Pittsburgh, Pa.

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS O

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Sch Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27,1y

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive En- 419y1

KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA.

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1y

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

## FINDINGS

—AND—

## MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

## BUSH & LOBDELL,

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES

Orders executed promptly to any extent for their

CELEBRATED WHEELS

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

MACHINE SHOP

SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPSION

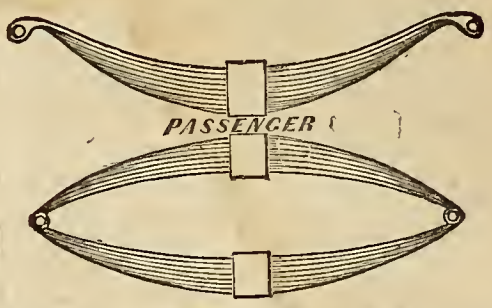
47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

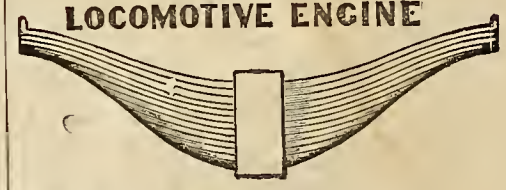
RAILWAY SPRINGS.

FREIGHT






LOCOMOTIVE ENGINE



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

ELLIPTIC AND SEMI-ELLIPTIC

SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

All Springs tested to double their usual load.

PHILIP S JUSTICE,

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

No. 47 West Front St., CINCINNATI

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

W. M. F. REWSON,

## STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stock. Bonds and other Securties on Commisson only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by w running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT.

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe. than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHING. TON CITY.

W. P. SMITH. *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞ Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M. leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Hbnses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph, Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞ Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT. General Ticket Agent.

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

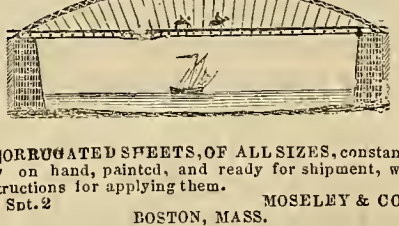
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2 MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to de6nite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

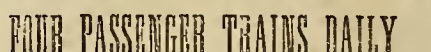
**Cast Iron Gas or Water Pipe**—4 to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!



## FOUR PASSENGER TRAINS DAILY

**RAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P M.; 11 30 P M night.

On Sundays, 4.30 A M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞ Through connections made for all points E Wes

WM. EARNS Supt

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, OCTOBER 5, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

**SUBSCRIPTIONS—$3 Per Annum, in Advance.**

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 140 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

| *Little Miami—* | *Depart.* | *Arrive.* |
|---|---|---|
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:50 P. M. | 10:05 A. M. |
| Morrow Accommodation | 5:20 P. M. | 7:45 A. M. |
| *Atlantic & Great Western—* | | |
| Morning Express | 9:40 A. M. | 7:20 A. M. |
| Night Express | 10:50 P. M. | 6:30 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:30 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Toledo, Detroit and Huntsville | 5:00 P. M. | 12:50 P. M. |
| Richmond and Chicago | 6:00 P. M. | 12:25 A. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | | 7:55 A. M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M. |
| Indianapolis & Cambridge City | 6:00 A. M. | 10.05 P. M. |
| " " " | 4:00 P. M. | 12:25 P. M. |
| Eastern Night Express | 10:50 P. M. | 7:50 A. M. |
| Mail and Express | 9:40 A. M. | 6:30 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Springfield and St. Joe Express | 1:00 P. M. | 5:07 P. M. |
| St. Louis and Chicago Express | 10:00 P. M. | 5:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 5:15 P. M. | 8:20 A. M. |
| Harrison Accommodation | 9:30 A. M. | 8:40 P. M. |
| Chicago and St. Louis Express | 7:15 A. M. | 9:00 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville Cambridge City & Indianapolis Mail | 6:00 A. M. | 10:00 P. M. |
| Connersville, Cambridge City & Indianapolis Express | 4:00 P. M. | 12:25 P. M. |
| *Ohio & Mississippi—* | | |
| St Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A. M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:30 P. M. |
| Louisville, Special Train | 3:5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 7:45 A. M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:12 P. M. |
| Evening Express | 2:35 P. M. | 6:07 A. M. |

The trains on the Little Miami and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time which is 12 minutes slower than Cincinnati time.

## SANDUSKY, DAYTON & CIN. R. R. COMPANY.

ANNUAL REPORT.

The present report is brought down to August, 1865, and gives the results of last year's operations, which gives a larger amount of earnings than in any year since the road was completed. Still it does not appear that the directors have been able to divide any dividend; and but a small balance remains on hand. Nothing is said of the reported arrangement with the New York Central, although it is constantly said and undenied that some arrangement has been made, by which the company is to use the line of the Sandusky & Dayton road in making their through route to Cincinnati. We trust it is so; for in whosoever hands it may be, this road will undoubtedly be benefitted.

The results of the year are thus stated by Mr. FOLLET, the President:

"The Treasurer's report shows the gross earnings for the year to be.....$719,924 15

Transportation and current expenses may be divided under the following heads:

| | | |
|---|---|---|
| Maintenance of Way | 167 613 23 | |
| Locomotive power | 163 969 94 | |
| Train expenses | 84,213 07 | |
| Machine and car shop | 35,574 22 | |
| Station Expenses | 72,858 97 | |
| | | $524,163.43 |
| | | $195,760.72 |
| Office expenses | 38,468 24 | |
| Insurance | 2 297 00 | |
| General expenses | 7,289 09 | |
| Interest account | 105,756.55 | |
| Taxes, U. S. and State | 35,569 00 | |
| Loss and damage on freight | 1,824 84 | |
| | | $191,187 22 |
| | | $4,573.50 |

This revenue, exceeding the receipts of any previous year since the opening of the road, has been derived from the following sources, to wit:

| | |
|---|---|
| From Passengers | $242,274.87 |
| " Freight | 435 801 54 |
| " Mail service | 16,680 00 |
| " Express and extra baggage | 15,128 07 |
| " Storage | 1,966 03 |
| " Car milage | 7,673 64 |
| Total | $719,924.15 |

The item of passenger receipts shows a gradual appreciation in the last four years of a decided and gratifying character. The lowest depression occurred in '61 and '62.—In these two years they stood at $115,000 and $112,000, respectively. Last year they were $184,614—increase $57,660."

The great difficulty with this road is, what Mr. Follet calls, want of "sympathy," that is there is no road at either end of this, which has felt any interest in sending through business over it; so that almost its sole business has been *local*. If it be true, as asserted, that it has formed a connection with the Lake Shore and the New York Central, it will have a large through freight business and some increase of passenger traffic.

Mr. Follet says:

"At our southern terminus we give,—but receive nothing in return, beyond what belongs to us locally. At the north, the same remark applies, except during the season of lake navigation. The subject is suggestive, and should lead to the clear apprehension of the truth, applicable alike to all roads, that, when built, their existence as a living element must be recognized. A different course is neither wise as a measure of present economy or future safety, and can not be adopted and sustained without warring on interests of broader scope than corporate profits The people on a line of railroad may not alway hold at their true value the advantages by its presence, but they will be slow in consenting to be deprived of them."

The report further adds:

"Since our last annual report we have secured title to the piece of ground, in Dayton, known as the "Philips Depot," held under contract with the C. H & D. Railroad, (now owned in common by the two roads,) by payment of balance due. We have also purchased a tract of land of some six acres, situated near New Richland, Logan county, for its gravel, and have occupied it with a convenient building for the hands. The occupancy of the Dayton grounds, at an early day, has become a necessity for the receipt and delivery of freight from connecting roads.

"No accident has happened to passengers the past year, which, considering the frequency and magnitude of casualties of this kind on surrounding roads and throughout the country, is cause for gratulation. Several casualties have occurred along the line and to employees, but in no case has blame been brought home to the management. This is creditable to officers and hands, and is deserving of mention and commendation."

This road may well congratulate itself on having no accidents; for accidents on many roads have become the rule and not the exception.

RESULT OF OPERATIONS.

For the twelve months ending June 30th, 1865:

| *Receipts.* | 1864. | 1865. |
|---|---|---|
| From passengers | $184,614 28 | $242 274,87 |
| From freight | 381,072.58 | 435,801 54 |
| From mail | 16 080 00 | 16 680 00 |
| From exp. and extra bag. | 11,666.58 | 16. 28.07 |
| From storage | 14.78 | 1,966.03 |
| From car milage | 6,719.94 | 7 673.64 |
| Total | $600,162.19 | $719,924.15 |
| *Expenses.* | | |
| Machine shop | 22,744 44 | 35.574 22 |
| Maintenance of way | 139 019 43 | 167 613.23 |
| Locomotive power | 122,654 29 | 153,9 3 94 |
| Train expenses | 73,574 10 | 84.213.07 |
| Station expenses | 63,586 19 | 75 156.87 |
| Office establishment | 39 938 43 | 38 468.34 |
| General expenses | 6,433.62 | 7,269 69 |
| Total expenses | $464 070.50 | $572 199.36 |
| Total receipts | 600,162.19 | 719,924 15 |
| Balance | 136 091 66 | $147 724.79 |
| LOSS AND DAMAGE OF FREIGHT | 2 342 27 | 1,824 84 |
| Balance | $133,749.39 | $145,899 95 |
| INTEREST ACCOUNT | | 105 756 55 |
| TAXES | | 35,569 90 |
| | | 141,326 45 |
| Balance | | 145,899 95 |
| Net Balance | | $4,573.50 |

## UNION PACIFIC RAILROAD.

It has been intimated in quarters that have no fair excuse for not being better informed on the subject, that little progress has as yet been made in the construction of the Union Pacific Railroad, one of the most immediately important of the divisions of the whole line, as its completion will ensure the more rapid and economical completion of the remaining part of the work. We have for a long time been aware of the great difficulties which have obstructed the progress of this work, but which are now so entirely overcome by the resolution and energy of the Direction, that not only the first forty miles may be considered as very nearly finished, but the whole line to the 100th parallel is well under way; while the engineers are approaching the Rocky Mountains with the most flattering prospect of there securing a line of easy grades and cheap construction. But that it may be seen we are speaking on good authority, we propose to give an analysis of the recent report of Springer Harbough, Esq., a Government Director in the Union Pacific Company, made to the Hon. Mr. Harlan, Secretary of the Interior, and made by one thoroughly comprehending the responsibility he is under to furnish an accurate and impartial report as to the real condition of the company, and of the road it has thus far been engaged in constructing. His communication is dated at Pittsburg, July 20, 1865. It would seem from this, that he was detailed by the President of the United States, in connection with Lieut. Col. Simpson, of the Corps of Engineers of the regular service, "to examine and report upon the location of the line west from Omaha, both as heretofore established, and as now proposed to be changed," by the Union Pacific Railroad Company, a change which has occasioned some discussion. As the duty, however, of examining and reporting upon the line heretofore established, as well as the engineering question involved in the case, was specially imposed upon Lieut. Col. Simpson, Mr. Harbough particularly directed his attention to "the condition, management and progress of the work," as directed by the 13th section of the amended act of incorporation, and such information as was in possession of the Department of the Interior.

### ROUTE OF MR. HARBOUGH.

He commenced his reconnoisance at Omaha City, on the Missouri River, the eastern terminus; thence along and over the proposed line westwardly to the head of the first grade; thence southwardly down the Mud Creek Valley to the Valley of the Papillion River; thence up that valley to a point where the line interseets its first established route, and from thence westwardly up the Valley of the Platte as far as the road is graded.

### GRADING.

The grading on the first 53 miles is nearly completed, and, as he believed, would be ready for the superstructure by the 10th of August, following the date of his report, and for the whole distance.

### BRIDGING.

The bridging of the first 32 miles consists of stone culverts, abutments and viaducts, and trestle and truss bridges, the latter on the plan of Mr. Howe.

The masonry on this part of the line is finished, except at the Elk Horn River; but this also was to have been completed by the 5th of August last. On these 32 miles, stone is used for the structures, and timber for the 22 miles; the material for which is delivered at Omaha, where also the frames are prepared ready to be put together.

### CHARACTER OF THE WORK.

With the slight exception of two or three culverts, and a few drains near Omaha, the work has been done in a very thorough manner; and even with regard to the portions doubted by Mr. Harbough, he states that railroad engineers have expressed the opinion that the work upon them is considered sufficiently permanent.

### CHARACTER OF MATERIALS.

The stone used is good limestone, found near the Papillion River and the Missouri River bluffs, with the exception of the masonry work on the Elk Horn River, which is of a dark colored sandstone, and which when first quarried is soft, but grows hard by exposure. This last quality was testified to by parties acquainted with the material, and confirmed by the personal examination of Mr. Harbough himself.

### ROAD BED.

The road bed, where completed, is from 12½ to 14 feet wide, well finished up, with side ditches for drainage, 4 feet at top, 2 at bottom, and 2 feet deep, with berm of from 5 to 6 feet in the deep cuts, which are generally from 30 to 40 feet wide. In these cuts the sub-soil is argillaceous and not liable to be affected by frost or rain. As yet gravel has not been found for ballasting along the line or contiguous to it, which will have to be made of the best material at hand. The expense of procuring it at a distance is as yet too great to render its use possible.

### LABOR.

Labor is becoming abundant and cheap; so much so, that the contractors are confident the whole of the first 100 miles will be graded and bridged by the first of October next, with the exception of the bridge over the Loup Fork. Mr. Harbough states that this assurance can be made good.

### LUMBER.

A curious fact, and one that shows the great embarrassment the company has met with, is the scarcity of lumber. All the shanties or huts used by the laborers, as well as tents, have been brought all the way from the Mississippi River, across the State of Iowa, a distance of 300 miles, and have to be moved onward as the work progresses.

### RETURN EXAMINATION.—MATERIALS ON HAND.

On returning to Omaha, there was an examination more in detail of that portion of the line first established between stations 900 and 150, which is given in the report as follows:

The materials then at Omaha ready for delivery, were—

| | |
|---|---|
| Cross ties | 9,000 |
| Rails | 7,786 |
| Chairs | 7,530 |
| Spikes | 75,000 |

On board steamers on the rivers between St. Louis and Omaha were also

| | |
|---|---|
| Rails | 5,582 |
| Chairs | 3,710 |
| Spikes | 164,550 |

Above Omaha, twelve miles distant on the banks of the Missouri, were 40,000 cross ties to be rafted down immediately. Large quantities of these were also being shipped daily from Pittsburg. Chairs and spikes for the first 90 miles are at Omaha, and in transit; and for the first 60 miles of track, rails and spikes are ready at Omaha, and in transit.

### TIES.

This important part of the structure is of oak, black walnut and cotton wood. This last being used from necessity is subjected to the process of burnetizing, a method invented some years' since in England, by Sir Wm. Burnet, and is an application by heat in a proper vessel of iron of chloride of zinc, which was discovered by him to be an entire preservative of wood. His method has not only come into general use in England, but partially in the United States, having been adopted successfully at Lowell, Wilmington, Philadelphia and Baltimore.

To adopt this process on a large scale, the company have constructed adequate works, as well as numerous steam saw mills, stationary and portable, for cutting these ties. In this way the want of other lumber is obviated, and the ties when so treated hold spikes as firmly as oak.

### TIES PER MILE.

It is proposed to lay down 2,500 per mile with 4 of hard wood to each rail.

### RAILS.

300 lbs. gross weight of iron rails are to be laid to each lineal yard, generally of 24 feet in length, and the residue 28 feet in length.

### ENGINEERS.

There are two full corps of Engineers engaged in further surveys, to and into the Rocky mountains, west of the head of the great valley of the Platte. One of these is running lines West from the eastern slope of the Black Hills, and the other engaged on the same work East of the great Salt Lake Valley, though not without embarrassment from tribes of predatory Indians.

### EQUIPMENTS.

On the 10th of July last, the following was the character and number of the Engines, Cars, &c.:

1 Locomotive at Omaha.

1 on the Hannibal and St. Joseph Railroad, awaiting shipment.

1 on ditto., used in getting cars over that road.

2 on the Chicago and Alton Railroad, used in transporting iron over the same.

20 platform cars on Chicago, Burlington and Quincy Railroad, in the same service.

20 ditto., at Quincy and between that and St. Joseph, 3 being used in transporting trucks, and materials for passenger and box cars to be put together at Omaha.

10 platform cars on the road to Quincy. All were being sent forward as fast as possible. Besides these, 70 other cars are purchased, and the passenger cars are sent forward in sections.

### TRACK LAYING.

The track laying was commenced on the 10th of July last, and the company expects to push this part of the work with diligence and rapidity.

### BRICKS AND BUILDINGS.

Preparations on a very large scale are made for the construction of suitable shops and buildings, for the accommodation of the company and its rolling stock; but some unavoidable delay has occurred by a hesitation as to their location, by reason of the variation in the location of line.

### MACHINERY.

It is stated that the machinery for the work shops, has already been sent forward from New York.

RIGHT OF WAY.

This is reported as being secured through Douglass, Sarpey and Dodge counties; has been generally arranged for, except in a few instances in Dodge, to obtain which, proper legal steps have been taken.

FUEL.

As yet coal has not been found in suitable quantities and at convenient distances for the use of the road; but the opinion prevails that on proper investigation, there will be no permanent inconvenience on this account, as it is believed ample supplies will shortly be obtained.

MR. HARBOUGHS' OPINIONS.

Having the knowledge that the other railways in progress are deficient at this time to the extent of 130 miles from the nearest terminus, with the great uncertainty in the river navigation, the scarcity of labor, and the innumerable difficulties which have arisen from time to time, Mr. Harbough is convinced, after personal examination, and a full knowledge of what has been accomplished, that the work has been pushed orward with commendable zeal; and he is satisfied that the construction of the next 200 miles will be effected at a comparatively small cost.

Mr. Harbough particularly calls the attention of the Department to the fact that the Union Pacific Railroad Co, cannot so well prosecute its work until the roads of Iowa are connected with it at some point on the main Trunk; and that they are not pushed as rapidly as their interest demands. The nearest point of approach is by the Chicago, Iowa and Nebraska Railroad, at Boonsborough, a distance of 130 miles east, on the Missouri river. The Mississippi and Missouri Railroad, is only open to Grinnell, Iowa. Other roads, such as the Burlington and Missouri River, the Dubuque and Sioux City, and others pointing to a connection with the Pacific, might do much to increase their traffic, through the richest and most beautiful country in the world. The report closes with pertinent remarks on the importance of the work, and illusions to some slight difficulties as to the terminus, occasioned by the interests at Omaha—now believe accommodated, and of no particular importance to our readers.

We have so often expressed our opinions on the great importance of the Union Pacific Railroad, that we do not deem it necessary to do so now.

We have, therefore, only to say that the report is not only a very satisfactory one, but it completely vindicates the company, its agents and contractors of any and all charges made against them by the ignorant, the misinformed, and the inimical, and is entitled to the just consideration of the Government in all respects. It is very evident that this report is a conclusive reply to the recent assaults made upon the road by parties who display not only a very bad spirit, but great ignorance of the subject; and who cannot even distinguish between one road and another.

Perhaps the *Journal* is right, that they have done the best they could under the circumstances; but they have failed to meet the expectations of the country. This is, however, undoubtedly attributable to the fact that it is a very "big thing," and the contest as to who should make the "pile," has had more to do with the "obstacles" than any *natural* impediments they have had to contend with. We do not know to which class we belong of the three named by the *Journal*, but we claim to have done as much for the building of railroads to the Pacific as any Journal in the country, both in Congress and out of it. We penned the first resolution that was passed by the Cincinnati Nat. Democratic Con. endorsing the policy of Government aid in its construction, and so arranged with personal friends that the other great National Party Convention *had* to embody the same policy in their platform. We have been the direct instrument of procuring the adoption of resolutions in at least half a dozen States, requesting Congress to make provision for such material aid; and written and published more in its favor than any other Journal. Notwithstanding, we confess that *we* are not satisfied, (*who cares*, will perhaps be exclaimed,) neither is the country, with the performances of *this* company. The country has a right to expect more vigor in its construction, and if it cannot be obtained by private enterprise, will, *per se*, have to adopt the plan (which we have frequently recommended, and which has also been endorsed by the *R. R. Journal*) of military construction. We cannot wait ten years more for a railroad to the Pacific our National necessities require that we should have it in much less time, and the wants of the hardy men who are developing the mineral wealth of our western possessions, from whom is to come the gold and silver to pay our national debt, need it *now*, and cannot afford to sacrifice their lives for the benefit of a few wrangling contractors and speculators. To take the *Journal's* account that on July 20, 1865, "the grading on the first 53 miles is nearly completed," as being a correct report as to "the condition, management and progress of the work," we deem as equivalent to admitting the management a failure, and an insult to the generosity and magnanimity of the American people.

---

LOUISVILLE, NEW ALBANY & CHICAGO RAILROAD.—The *Lafayette Commercial Advertiser* says: We are pleased to see that this road is being made one of the best in the West. In our city the old, worn-out rails and ties are being replaced by new ones, and we understand that all along the line, from Michigan City to New Albany, thorough repairs are being made in the road-bed and bridges. Trains on the northern part of this route are furnished with the elegant passenger coaches of the Michigan Central Railroad, the finest in the country. Mr. B. F. MASTEN, the superintendent of this road, it will be seen, is an energetic railroad man, and that the interests of the company are placed in competent hands.

---

☞ Mr. William Evans of London and a director of the Erie road will arrive by the Cuba this week. It is stated that Mr. Pearson has negotiated a loan for the road sufficient to pay the loan of Mr. Drew, and to give the company all it requires for new work. The loan is stated to be $4,000,000. Upon the street 5,000 shares were taken in one lot at 88⅝.

## LIABILITY OF RAILROAD COMPANIES FOR INJURIES TO EMPLOYEES.

In a late article we adverted casually to this subject, and stated the rule to be that, in general, a servant of a railroad company could not recover against the company for an injury occurring in the course of his employment as such servant. The reason of the rule is, that the servant must judge for himself whether there is any probability of injury arising to himself, and he is not bound to incur risk in the service. He has the same and oftentimes better opportunities of judging of the probability of injury than his employers, and is in a position to decline the service, if he chooses to do so. The case of Hutchinson *vs.* N. York & B. R. R. Co., 6, Rail Ca., 580, will serve to illustrate the law upon this subject. The plaintiff's declaration stated that H. was in the service of the defendants, and that in discharge of his duties as such servant, he became a passenger in a car of the defendants drawn by a steam engine under the guidance of the defendants; that the defendants were possessed of another steam engine which then was drawing other cars under the guidance of the defendants by their servants. Yet defendants acted so negligently in and about the guidance of the first mentioned engine, and in and about the other engine, that a collision took place and H. was killed. The defendants pleaded that the collision took place solely through the carelessness, negligence, &c, of the defendant's servants, who were fit and competent persons to have the guidance of the same, and that the negligence, &c, was not authorized by the defendants and was without their leave. It was held by the Court that the declaration did not disclose any cause of action, and the action could not be maintained, although the company it seems, would have been liable, had H. not been, at the time of the accident in the actual service of the company. There are, however,

EXCEPTIONS TO THE RULE.

There seems to be no doubt that if there be any fault on the part of the company in the selection of the other servants, or in continuing them in their places after they have proved incompetent, or in the employing of unsafe machinery, the company *will be answerable* for all injury to their servants in consequence.

A railroad company which continues in use a dangerous and defective locomotive engine, after notice of its dangerous condition, is liable to one of its servants engaged in running such engine for an injury sustained by him, (without negligence on his part,) in consequence of such defects. This law was laid down by the Court of Appeals of this State in the case of Keegan *vs.* The Western Railroad Company, 4 Selden, 175. The Chief Justice, in rendering the opinion of the Court in that case, remarks, that the cases in which it has been held that a principal is not liable to one agent or servant for an injury sustained by him in consequence of the misfeasance or negligence of another agent or servant of the same principal while engaged in the same general business, are only applicable when the injury complained of happened without any actual fault or misconduct of the principal, either in the act which caused the injury or in the selection and employment of the agent by whose fault it did happen.

Whenever the injury results from the actual negligence or misfeasance of the principal, he is liable as well in the case of one of his ser-

vants as in any other. But where the injury results from the actual fault of a competent and careful agent, (as may sometimes happen,) the fault will not be imputed to the principal when the injury falls upon another servant, as it will where the injury falls upon a third person, as for instance upon a passenger. In the case of a passenger, the actual fault is imputed to the company itself, on the grounds of public policy; in the case of a servant it is not.

It makes no difference in regard to the liability of the company, that the person came into the service voluntarily, to assist the servants of the company in a particular emergency, and was killed by the negligence of some of the servants

In the case of McMillan *vs.* The Saratoga and Washington Railroad Company, 20 Barb., 449, it was held that to entitle a servant, for example, a locomotive engineer, to recover for an injury happening to him in the course of his service, through defects in the machinery, &c., used in the discharge of his duties, he must prove actual notice to his principal of the defects.

But we think it may be doubted whether actual notice is necessary in a case of *culpable* negligence on the part of the company. Thus, if the master might have known the exposure of the servant, but for his own want of ordinary care, as in the use of a defective locomotive engine, which exploded and injured the servant through defective construction, the master is liable for the injury. (Noyes *vs.* Smith, 28 Vt. Rep., 59 )

Of course, if the servant knew of the defects, and did not inform the company, or if the defects were known to both the servant and the company, and the servant makes no objection to continue the service, he probably could not recover of the company for any damage in consequence. But if the company knew of the defect, and directs the servant to continue the service in a prescribed manner, they are undoubtedly responsible for consequences.

A railroad company cannot be regarded as in any sense guarantors of the sufficiency and safety of their machinery, but are responsible only, when injury occurs to servants without fault on their part, and through the neglect of the company to furnish machinery and apparatus reasonably safe for the uses to which it is put. (See 5 Ohio R. 91.) A conductor or engineer, for instance, may demand of the company reasonable care and diligence in procuring and keeping such machinery and apparatus, as is safe for the uses to which it is put; and beyond this, it is one of the hazards of his contract, that such conductor must take the risk of accidents.

But a conductor, not being under the control of any superior, in immediate and constant contact, is bound to exercise an independent and prudent forecast as to perils; and inspection of machinery to guard against such perils and the liability to accidents; and if he receive an injury, while neglecting such duty, or through mismanagement of his train in any particular, or through any defect or insufficiency of the machinery of which he was previously aware, or which would have been discovered by that careful inspection which it was his duty to have made, he cannot recover of the company; nor can he recover, if the defect in the machinery causing the accident, were unknown both to the conductor and the company, and neither party was in fault. It is the duty of the company to furnish the requisite number of hands, for the safe management of their trains; and if they do not, the conductor may legally decline to continue in the service; but if under these circumstances, he still continues to operate the train, he voluntarily assumes the risk and waives the obligation of the company in this respect to himself, and can have no redress for damages so incurred.

SERVANTS IN DIFFERENT GRADES OF EMPLOYMENT.

There has been a good deal of discussion in the books as to whether the rule that servants cannot recover for the injuries received in the course of their employment, as stated above, applies to servants of every grade Thus, in a case decided in Georgia, (Scudder *vs.* Woodbridge, 1 Ga., 195,) the Court held that the rule, that the master is not liable for an injury to one servant, inflicted by the want of care or skill in a fellow servant, does not apply to the case of slaves employed on the road; and in Scotland the law seems well settled, that servants who have no employment in the matter wherein the accident occurs, may recover for injuries received thereby.

In Ohio it has been held that a day laborer upon a railroad, who was not under any obligation to renew his work from day to day, and who was injured through the negligence of the conductor of one of the company's trains, upon which he was returning home, free or charge after completing his day's work, could recover. (20 Ohio R, 415; 3 Obio State R., 202.)

Where laborers upon a railway were transported to and from their labor and meals upon the gravel trains of the company which they were employed in loading and unloading, but had no agency in managing, and in such transportation by the gross negligence and unskillfulness of the engineer, were injured, it was held that the company were liable.

But this doctrine has not met with favor, and the rule is well settled in this State, at least, that a servant who sustains an injury from the negligence of a superior agent engaged in the same general business cannot maintain an action against their common employer, although he was subject to the control of such superior agent, and could not guard against his negligence or its consequences. The law is laid down in the case of Sherman *vs.* Rochester and Syracuse Railroad Company, 17 N. Y., 153.

In that case, the plaintiff's husband was a brakeman in the employ of the defendants, whose duty it was to apply the brakes as often as he should be signaled to do so by the engineer or conductor. and was bound to obey the instructions of his superior officers. The train was running the usual and dangerous speed of eighty miles an hour, by reason of which it could not be stopped in sufficient time to prevent its collision with cattle upon the track. Several cars were thrown from the track, and the brakeman was killed. The Court held that, notwithstanding this culpable negligence on the part of the engineer and conductor, the widow of the brakeman could not recover damages against the company. The Court remarks, in that case, that the same rule of liability which we have above stated in general, must necessarily apply as well where the employments of the servants are distinct as to cases where they are one; and to the several grades of employments where those in the inferior are subject to the direction and control of those in the higher grades, as to cases where all occupy a common footing and possess equal authority. No distinction or exception as to liability of the principal, resting upon the inability of the injured party to protect himself in the particular case, can therefore be made, without abrogating the entire rule.

The case of Russell *vs.* The Hudson River Railroad Company, 17 N. Y., 134, was one in which it appeared that plaintiff was employed by the company in loading gravel and sand at the pits where they were dug, for transportation to places upon the road where filling was required. It was the practice of those workmen who lived in New York to come and go home on the cars, paying no fare either way. On the day the accident occurred, the plaintiff went upon the cars with every load of gravel for the purpose of assisting to unload it. After discharging the gravel the train went to New York with the workmen residing there, the day's work being finished. The train ran off the track into Spuyten Duyvel Creek, and the plaintiff was injured. The Court held, in opposition to the Ohio cases before cited, that the plaintiff could not recover, and that a laborer employed to work in connection with a train, under an arrangement by which he is to be conveyed home every night in such cars, free of charge, cannot maintain an action against the company for any injury received while thus riding home, in consequence of the negligence of the engineer. This decision is also in opposition to the case of Fitzpatrick *vs.* New Albany and Salem Railroad Company, 7 Porter (Ind,) 436 (See also Timmons *vs* Central Ohio Railroad Company, 6 Ohio St, 105 )

But this rule cannot be applied to the cases of carpenters or civil engineers, or other employees who go out of their regular course of employment by direction of the company, and, while so engaged, suffer injuries by the negligence of the company's servants.

Thus, a carpenter employed by a railway company to build one of their bridges, and who took passage in their cars by their directions, to go to a certain point, for the purpose of loading timber to be used in building the bridge, and who was injured in the course of the passage by the negligent conduct of the train, is entitled to recover of the company, the plaintiff having no particular connection with the conduct of the business with which he was injured. Gilenwater *vs.* Madison and Indianapolis Railway, 5 Ind. R, 340.

And where a contractor engaged in repairing a bridge upon a railroad for the company, employs men to work thereon by the day, and one of them while thus employed on the bridge receives an injury from a passing train, he may maintain an action for damages against the company; provided he can show that the injury was caused by the negligence of the company's servants or agents in charge of the train, without any fault or negligence on his part. For in this case, the injured man was not the servant of the company, but of the contractor. (Young *vs.* New York Central Railroad Company, 30 Barb., 229 ) It cannot be presumed that he contracted with reference to any risk arising from the running of trains on the road, but only with reference to accidents arising from the nature of his own occupation, independent of the road. (3 Mees. & Wels., 1; 4 Metc., 49; 8 N. Y., 175; 18 Id., 432; 18 Id , 136, 156; 6 Barb., 231; 5 N Y., 50; 5 Barn. & Cres , 560; 12 Adol. & Ellis, 737.)—*Am. R. R. Jour.*

☞ Railroads in Minnesota are being built rapidly, and the lands along the routes promise to be as valuable as those in Illinois along the Illinois Central. Sales are being made of the lands of the St. Paul and Pacific Railroad at $5 to $15 per acre.

[From Sacramento Daily Union.]

## THE RAILROAD CENTRE.

The purchase of a controlling interest in the Sacramento Valley Railroad by the Central Pacific Railroad Company will tend to confirm the position of the capital as the railroad centre of the State. By this adroit and sagacious movement, various schemes for carrying trade and travel around Sacramento, running iron tracks to paper towns and getting government aid for a balloon route to Washoe are suddenly blighted, and, henceforth, in developing the railroad system of the great valley, there will be consistency of plan, harmony and convergence of interests, and a devotion of wise effort to building up from foundations already secured rather than a waste of enargy and money in faneiful competition. Freeport perishes in its infancy. Placerville assumes its legitimate position as the distributing point of El Dorado county, and may soon congratulate itself upon having railway communication with a navigable stream at Sacramento. The railroads reaching northward for the trade of the northern mines will be tributary to the Pacific highway, and the traffic must pass into, or through, the Capital. The "rival route" vanishes from the dreams of perturbed brains, and all interests are concentrated in urging the seeediest completion of the national railway across the Sierra upon the line favored by nature and the government. To the citizens of Sacramento this stroke of intelligent enterprise must be peculiarly gratifying, for its strong assurance of a future of progressive prosperity. We are passing through a period of transition. The construction of railways in a new country, though sure to be ultimately productive of great benefit, is often attended with the decline of certain branches of business, which, in the era of teaming, are sources of profit. By the change of communication, towns that have lived upon traffic are sometimes converted into centers of manufacturing industry, while others, retaining trade, are compelled to conduct it under new conditions. While the change is in progress, and before the benefits of the railroads can be distinguished, there is usually a season of depression, of doubt as to the value of real estate investments, and even of prediction of sure decay in cities eligibly located for distributing marts, if not for foreign commerce, and presenting decided attractions as places of residence. The old Knickbockers of Albany could see no profit for their town in the construction of the New York Central Railroad. They only saw a fresh channel for carrying trade through to the grand reservoir on Manhatten Island. But as the country along the line of the railroad was settled and developed, and travel increased, Albany began to grow, to get trade from its own section of the State, to establish factories and foundries, and today the capital of the Empire State, instead of being swallowed up by the cormorant metropolis, is a busy city with sixty thousand inhabitants. Sacramento holds the same relation to San Francisco that Albany holds to New York. The railroads that centre here will undoubtedly help to swell the profits of the merchants at the Bay, and probably depress certain branches of business that have flourished at this point, but they will also develop and concentrate a large and lucrative trade which San Francisco is too distant to attract. With a location in the center of the valley and unrivaled facilities for transportation, it depends altogether upon the enterprise and tact of the business men of Sacramento whether their city shall achieve the position of the great inland mart of the mines and the ranches between the Sierra and the Coast Ranges, as this section of the State gains population. The railroads will concentrate at this point the materials for manufactures. Whether these shall remain or pass on to San Francisco, depends upon the presence of absence of energy, capital and skilled labor. Energy Sacramento has in abundance. The necessary capital and labor will eventually seek the most advantageous field.

This settlement of the railroad question is not less important to many of the central and northern counties of California than to the capital of the State. Whether for dispelling illusions, for exciting fresh hopes, or deciding what is to be the focus of the railway system, and what are to be the routes of trade and travel, and an early adjustment of the issues raised by conflicting interests was desirable. If El Dorado county is destined to lose the drippings of the Washoe trade, it has mineral and agricultural resources to be developed, and that advantage over many other counries, excellent facilities for reaching a market. The people along the lines of the northern railroads will cease to be amused by the fancies of Freeport speculators and look to Sacramento as the legitimate market of their trade and the fixed point from which the routes of travel are to radiate. And the advantage will be reciprocal, for the business men of Sacramento, unvexed by schemes hostile to the interests of the capital, will endeavor to encourage more intimate relations with probable customers in that direction and transact business on more liberal terms. Money would have been wasted in trying to carry the trade of the northern counties around Sacramento to Freeport. Now, the completion of the California Central Railroad as a feeder of the Pacific, will be a remunerative enterprise.

## BAMBOO PAPER.

The manufacture of paper from bamboo wood is another of those modern inventions which follow so hard upon each other; and the works of "The Fiber Disintegrating Company," as the company owning the patent is styled, at Red Hook (Brooklyn) are well worthy of a visit.

The company was organized about a year since, and have recently commenced the manufacture of paper under their patent, in the building formerly known to the police as "Sebastopol," and occupied by a company engaged in the manufacture of parafine candles. The works can hardly be said to be complete as yet, inasmuch as only brown, or what is styled hardware, paper is manufactured on the premises, but we believe it is the intention of the company to shortly erect suitable machinery and appliances for the manufacture of all kinds of paper. As it may be interesting to many of our readers to know how paper can be made out of wood, a short sketch of the *modus operandi* will not be without interest, and will fittingly close this hurried sketch. Bamboo, which grows in unlimited quantities in the island of Jamaica, beyond serving to form partitions between the various ships' cargoes leaving that island, has never been exported, and only used on the island for few purposes. It has now suddenly become an article of export, and the vast jungles of bamboo promise to become almost as valuable as fields of waving grain. The bamboo, after being taken out of the ship, is tied in bundles about five feet long, which are soaked in a large tank for about 24 hours. The bundles are then placed in five large steam guns, each 24 feet in length and 15 inches in diameter. Here for half an hour the bamboo is subjected to a pressure of 180 pounds of steam, which reduces it to such a condition that when, upon a given signal, the guns are discharged by the opening of one of the ends, the bamboo, in the shape of a quantity of fibrous material, looking as much like hemp as possible, is thrown out. This fibrous matter is then placed in a tank and soaked in a solution of spent alkali. It is next washed, and goes into what are called the "egg-boilers," so called form their resemblance to that useful article of domestic consumption. Here the matter is subjected to another boiling and steam pressure, and from thence it is conveyed to the pulp boilers, where it is boiled in a strong solution of alkali at 90 pounds pressure. The remainder of the process is similar to that of ordinary paper-manufacture.—*Brooklyn Eagle.*

We were shown by Mr. Howland specimens of the paper made from the bamboo, which had the strength of linen paper, was as white as need be, and had a peculiar smoothness in its finish. It received the ink well, and was in every way satisfactory; we were, however, unable to find out at what price they could afford to make it, which is the great item, the present price of paper being a great drawback on publishing. Mr. H also said they could make a good article of paper out of one half Mississippi river cane and the other half bamboo, but that all cane had not sufficient strength.

## SEASONING LUMBER.

In the matter of properly seasoning and drying lumber which is very imperfectly understood, a correspondent of the *Scientific American* mentions "the Hungarian mode of steaming out the albumen by common escape steam, then plunging the lumber into ice water, and afterwards drying it in a close room, which, of course, immediately becomes a steam chamber, provided there is moisture remaining in the lumber which can be changed into steam. He says:

This placing the lumber in ice water is a regular hocus pocus, for all the object to be gained by it is to prevent the closing of the pores of the lumber on the outside while going through the farce of changing the lumber from the common steam to the steam drying room. And even in that case common cold, warm or hot water would answer just as well, while it would be far better to leave the lumber in the first steam room, and apply heat to it, so as to preserve a steam atmosphere by steam generated from the drying lumber, which steam excludes the air and prevents closing the pores on the outside until the moisture has passed out of the center.

It seeme, however, the Hungarians had the idea that lumber must be seasoned as well as dried; and in that respect they were in advance of many wouldbe wiser persons, who suppose that drying of lumber is also seasoning it. Lumber may be dried and not seasoned, or seasoned and not dried. It needs both as much as either, for most kinds of uses. To season lumber is to deal with its albumen; if this albumen is soaked, boiled or steamed out, the lumber is seasoned, though the loss of the albumen diminishes its strength and durability, as well as the beauty of finish of all

lumber and timber. When all the strength and beauty of the lumber is desired, the albumen should be coagulated and retained in the pores of the lumber.

It is well known to scientific men that when wood dries the sap retires toward the center, carrying with it the albumen, while the aqueous portion is evaporated. This albumen follows the medullary rays to the heart wood, and when once dried and again wetted it swells with an uncontrollable force, which checks or bursts the stock. The starch contained in this sap changes to acetic acid as soon as it comes into contact with water or a moist atmosphere, and eramacaus, or dry rot ensues.

The proper way, therefore, is to coagulate this albumen, so as to make it insoluble in cold water, and still leave the albumen in the pores of the lumber, where it belongs, and where its presence is as valuable as paint for its preservation, or as pumice stone or sbellac to make a smooth or finished surface.

It is evident that "Anthrax" has a very imperfect idea of the American patent mode, as he calls it, for seasoning and drying by superheated steam. He seems to confound superheated steam made under high pressure, requiring strong and expensive boilers—the use of which, he says, is one of "great delicacy," with the new mode, by means of which a much higher degree of heat may be obtained than would be practical or safe when made under pressure; and yet the new mode requires no greater pressure than will just balance the pressure of the atmosphere, requiring no expensive apparatus; no safety valves, and not even a steam boiler, and with the whole apparatus and its management so simple that any boy that can build a fire and read the thermometer can work it perfectly. Besides, where steam is superheated in particles, as in the new mode, the heat can be applied so as to obtain any kind of an atmosphere desired, from 100 to 1,000 degrees or more. In fact, this kind of steam is now used to melt iron, and excels all other modes for that purpose, both in economy and in the quality of the iron produced.

By the new mode of seasoning and drying I placed 9,000 green gun stocks in a kiln, say 16 by 24 feet, at one of the large armories, and then took six of the stocks as samples of the remainder, and gaged each stock into 1-64th of an inch, and weighed them in pounds and ounces. Each 24 hours, or day, these stocks were separated, re-weighed and gaged, to ascertain the daily progress in drying and shrinking. If necessary, I can furnish the weight and gage of each stock, but will at present give the result of the six stocks combined, to wit: The first 24 hours they lost in weight 12 pounds 13 ounces, or 2 pounds and 2 2-5 ounces each, which, if applied to the whole 9,000 in the kiln, would show over 19,000 pounds of water removed during the first 24 hours. The second 24 hours the six stocks lost 5 pounds, 5 ounces; and, by continuing the fire 12 hours longer, they lost 2 pounds, 13 ounces.

During the first 24 hours the combined gage of the six stocks was diminished 23-64ths of an inch; second 24 hours, 9-64ths of an inch; last 12 hours, none; thus showing that by this process the shrinking is all completed before the drying is all done, while the seasoning and drying occupied only 2½ days.

There is no necessity for drying lumber after the shrinking is all completed. It is worthy of note, however, that in the finishing of these stocks it was ascertained that the usual wetting of the stock after the first finishing did not raise any grain on the wood, thus showing that the seasoning, as well as the shrinking, was performed in the same kiln in 2½ days, while the albumen was so thoroughly coagulated as to become practically insoluble in cold water.

I have extracted at the rate of over 1,900 pounds of water from 1,000 feet of green lumber, as a part of a large kiln, in four days.

## AGRICULTURE OF THE UNITED STATES.

We continue our account of the agriculture of the United States, with the following table of oats production, taken from Mr. Kennedy's Compendium of the Census:

| STATES. | BUSH. |
|---|---|
| Alabama | 682,179 |
| Arkansas | 475,268 |
| California | 1,043,006 |
| Connecticut | 1,522,218 |
| Delaware | 1,046,910 |
| Florida | 46,899 |
| Georgia | 1,231,817 |
| Illinois | 15,220,029 |
| Indiana | 5,317,831 |
| Iowa | 5,887,645 |
| Kansas | 88,325 |
| Kentucky | 4,617,029 |
| Louisiana | 89,377 |
| Maine | 2,988,939 |
| Maryland | 3,959,298 |
| Massachusetts | 1,180,075 |
| Michigan | 4,036,980 |
| Minnesota | 2,176,002 |
| Mississippi | 221,235 |
| Missouri | 3,680,870 |
| New Hampshire | 1,329,233 |
| New Jersey | 4,539,132 |
| New York | 35,175,134 |
| North Carolina | 2,781,860 |
| Ohio | 15,409,234 |
| Oregon | 885,673 |
| Pennsylvania | 27,387,147 |
| Rhode Island | 244,453 |
| South Carolina | 936,974 |
| Tennessee | 2,267,814 |
| Texas | 985,889 |
| Vermont | 3,630,267 |
| Virginia | 10,186,720 |
| Wisconsin | 11,059,260 |
| Total, States | 172,330,722 |
| TERRITORIES. | BUSH. |
| District of Columbia | 29,548 |
| Dakota | 2,540 |
| Nebraska | 74,502 |
| Nevada | 1,082 |
| New Mexico | 7,246 |
| Utah | 63,211 |
| Washington | 134,334 |
| Total, Territories | 312,463 |
| Aggregate | 172,643,185 |

More oats than wheat is raised in the United States by over a million bushels. In 1860 there were 172,643,185 bushels of oats raised, against 146,584,179 bushels in 1850. The increase is by no means equal to the increase in population, and is far less than the increase in wheat and Indian corn.

New York is the greatest oat-growing State in the Union, producing 35,175,134 bushels. Pennsylvania comes next, producing 27,387,147 bushels. Ohio stands third, producing 15,409,234 bushels. Illinois is fourth, producing 15,220,029 bushels. Wisconsin stands fifth, producing 11,059,270 bushels. Virginia comes next, producing 10,186,720 bushels.

The four States of New York, Pennsylvania, Ohio, and Illinois, produce more oats than all the other States and Territories.

The New England States produced 10,766,523 bushels in 1860, against 8,101,268 in 1850, as follows:

| | 1860 | 1850 |
|---|---|---|
| Maine | 2,988,939 | 2,181,037 |
| New Hampshire | 1,329,233 | 973,381 |
| Vermont | 3,630 267 | 2,307,734 |
| Massachusetts | 1,180,075 | 1,165,146 |
| Rhode Island | 234,453 | 215,232 |
| Connecticut | 1,522,218 | 1,258,738 |
| | 10,885,185 | 8,101,268 |

## THE COAL TRADE.

The activity at the mines and on the railroads in Pennsylvania is very great. At the same time, strong efforts are made to keep up and advance the price of coal. Scranton coal is scarce among the local dealers, owing to the inactivity of the Company. Their disagreement with the laborers is said to be ended. The supply of coal has fallen below the amount shipped last year by over a million and a quarter of tons.

The shipments this season, as compared with last, are as follows:

| | TONS. |
|---|---|
| 1864 | 7,391,749 |
| 1865 | 6,070,371 |
| Decrease this year | 1,321,378 |

The press in Philadelphia are insisting upon the high prices as unavoidable. Thus the *Ledger* says:

"The coal trade was never more active than it is just now, and the demand for coal rarely, if ever, more in advance of the supply. Notwithstanding the heavy coal tunnage from the Schuylkill and the Lehigh, weekly shippers of coal are far behind in their deliveries, and orders for coal steady accumulate. The trade was for some little time interrupted on the Delaware division by a break in that canal, and for a short time in the Schuylkill region, and still in the Lackawanua, by turnouts among the miners; but a more effective cause for the scarcity of coal may be found in the fact that most people, and especially coal producers, were greatly mistaken as to the effect of peace on the trade. The impression has been well-nigh universal that the consumption of coal by the Government for steam marine purposes the past three years would almost entirely cease when the steam fleets kept afloat for transportation, blockading, etc., ceased to be used for such purposes by the close of the war. The fact was overlooked or underestimated, that after passing from the Government to private owners, these floating coal-consumers would have to be kept in use to be profitable, and to keep them in use, coal is absolutely necessary. Nobody buys a government steamer to tie it up in dock. The purpose is to make money from it, and the more actively kept afloat the greater the probabilities of profit. We are informed by persons in the business that the consumption of coal by the steam marine of the country, now in private hands, is much greater than at any time in the past three years, when it was so largely in the service of the Government. Steamships in the hands of private enterprise have their fires almost constantly ablaze; whereas, when on blockade duty, their fires were much the greater portion of the time "banked," consuming very little fuel. Another matter not fully estimated, for in this year's production

is the usual annual increase in the consumption of coal. This is set down as at least ten per cent, and yet the tonnage of the present year, so far, shows scarcely any increase on that of 1861; and to keep up with the estimated annual average of increased consumption of ten per cent. per annum, it should be forty per cent. greater. On September 1st, 1861, the coal tonnage of the several leading carrying companies was 5,111,676 tons, against 5,173,244 tons to about the same time the present year—an increase of only 61,568 tons, when to keep up with the estimated annual increase of ten per cent. for four years since 1861, the coal production at this time should be over 7,000,000 tons. The Southern cities are most effectually cleaned out of fuel, and vessels are cleared hence to supply those ports as fast as coal can be had to load them. On one single day of the past week there were cleared from this port four steamers, two barks, three brigs, and fifty-nine schooners—total sixty-eight. The arrivals the same day comprised one ship, three steamers, seven barks, nine brigs, and ninety-eight schooners, making a total of one hundred and eighteen vessels. This shipping covered every description of produce, but probably nine-tenths of it was engaged in carrying coal. Steamboats on the Southern rivers, and every description of steam-factory about to be put in operation, are demanding large amounts of our staple coal. Our own iron-works are coming into full work to meet the demand all over the country for iron, and unless the coal-producers increase their supply very materially, the chances are that last season's highest prices will be reached before the coming winter is half over."—*Stockholder.*

## THE SMOKY HILL ROUTE TO THE PACIFIC.

The following from the Chicago *Tribune* of the 13th presents some facts of much importance in the world's commerce, as well as of interest to our readers:

Butterfield's Overland Dispatch Company's new route across the continent is a development of vast geographical and mercantile importance. It has a significance and value beyond its association with this enterprising company, and is as broad as the relations and value of the carrying trade they so prominently represent. A path that commends itself to their sagacity by its shortness and freedom from the evils of other emigrant routes, will be sure to be followed by others, and to become the wide and full conduit of the enterprise and the resources of the regions it connects. The discovery is, in fact, but a re-discovery, since the route was first traveled in 1859, at the early outbreak of the Pike's Peak fever. It was broken up by the Indian troubles, the Government declining to protect both routes, and abandoning the newer one, its now known advantages not then standing confessed. It has, throughout the interim of disuse, been claimed to be the shortest and most practicable route between Kansas and the mountains, and the discovery of Butterfield's Overland Dispatch Company is, therefore, but the actual establishment of the truth of the claim. It is from one hundred to one hundred and fifty miles shorter than any other path of travel across the plains. It avoids the terrible alkali sections, whitened with the bones of the emigrant's cattle through past seasons. It traverses a region two weeks earlier in verdure, lengthening by so much the emigrant season. It may be traced on the map as following the valley of the Kaw or Kansas, to the forks of the Smoky Hill river, up which valley it penetrates to the heart of the continent. There is less sand on the route, and more timber, better and more abundant water. It only remains to be added that it has been taken under the thorough protection of the Government, not again to be abandoned, and that already has begun the immense carrying trade of the express company, so permanently identified with its restoration.

## THE AMERICAN INSTITUTE FAIR.

AMERICAN BESSEMER STEEL.

Winslow, Griswold & Holley, of Troy, N. Y., exhibit specimens of their cast-steel, made under Bessemer's patent, of which they are the sole proprietors in the United States. Their present plant limits them to two-ton ingots; but they have nearly complete a new plant for fifteen-ton ingots. The largest samples shown, therefore, are of moderate size. A connecting-rod for a marine engine, forged by Tugnot & Bally, is a solid piece of forging, and has finish enough to show its soundness. A large ingot, partly forced into a piston-rod, or something like it, and turned, shows well. And there are some finished shafts and partly finished railway axles very perfect in appearance, and that have a clear ring when struck by a hammer, indicating freedom from flaws. One axle is bent double, the inner sides meeting within an inch, without cracking in the least. Several square bars are bent double; others are twisted:—all the bends and twists were made when the samples were cold. Several pieces of rails are twisted, one turn in two feet. All the samples appear to bear as much bending and twisting as the best iron. There are samples of boiler plate worked into the most difficult forms, with entire solidity; several hemispherical cavities are worked in by the hammer, and a flange is turned out around a 6-inch hole, commencing from a ¾ hole, all the metal being retained in the flange. The working seems to be better than is possible with the best iron, and as free from imperfections as if done in copper. The durability of rails made of ingots supplied by Bessemer & Co. to the London and Northwestern Railway Company, is stated by the London *Engineer* to have been as follows:—"A steel double-head rail was laid between iron rails at the Crewe station. One side of the steel outlasted both sides of seven iron rails."—*Amer. Artisan.*

A New Railroad Connection.—The North Missouri and Cedar Rapids Railroad Company is the name of a new corporation organized at Ottumwa, Iowa, for the purpose of constructing a railroad from Ottumwa to Cedar Rapids, a distance of seventy-five miles. Only twenty-eight miles more will be required to complete this railroad to a junction with the North Missouri Railroad at the State line, and the latter road will soon be constructed to that point. When this link is completed, it will make a continuous road from Dubuque to Keokuk, a distance of 225 miles. The track is now being laid between Marion and Cedar Rapids on the D. S. W. R. R., and this road will be open from Dubuque to Cedar Rapids, for passengers and freight, by the first of September next.

## SPECIE MOVEMENTS.

We present the entire specie movement at this port for the last month:

| | |
|---|---|
| Specie in Banks and Sub Treas., Aug. 1 | $10,132,500 |
| Received from California in August | 1,676,177 |
| Imported from foreign ports in August | 182 072 |
| Gathered in from boards in August | 2 662,542 |
| Supply | $53,959 291 |
| Exported in August | 1,554,393 |
| Leaves in Banks and Sub Treas., Sept. 1, '65 | $52,404,898 |

We now bring forward our table showing the movement of specie at this port since January 1st:

| | | | | |
|---|---|---|---|---|
| Specie in Banks and Sub-Treas., Jan. 1, '65 | | | | $30 054,450 |
| Received from California in Jan | | | $2 043,457 | |
| " " " | Feb | | 914 735 | |
| " " " | March | | 1 668,975 | |
| " " " | April | | 2,307 025 | |
| " " " | May | | 1,257,651 | |
| " " " | June | | 750,495 | |
| " " " | July | | 1,092,805 | |
| " " " | Aug | | 1,676 177 | |
| | | | | 11,711,294 |
| Imp'd from foreign ports in | Jan | | 52 242 | |
| " " " | Feb | | 106 704 | |
| " " " | March | | 243 242 | |
| " " " | April | | 236 492 | |
| " " " | May | | 177,085 | |
| " " " | June | | 249,732 | |
| " " " | July | | 1,092,805 | |
| " " " | Aug | | 1,676,177 | |
| | | | | 1,501,235 |
| Gathered in from boards in | Jan | | 1 376 923 | |
| " " " | Feb | | 4,181,853 | |
| " " " | March | | 899,350 | |
| " " " | April | | 1,372 824 | |
| " " " | May | | 8,892,448 | |
| " " " | June | | 5,329,172 | |
| " " " | July | | 4,710,940 | |
| " " " | Aug | | 2,668,542 | |
| | | | | 29,332,057 |
| Total supply | | | | $72,509,036 |
| Exported to foreign ports in | Jan | | $3,184,853 | |
| " " " | Feb | | 1,023,201 | |
| " " " | March | | 381,913 | |
| " " " | April | | 871,240 | |
| " " " | May | | 7 255,071 | |
| " " " | June | | 5,199,472 | |
| " " " | July | | 723,986 | |
| " " " | Aug | | 1,554,393 | |
| | | | | 20,194 143 |
| Leaves in Banks and Sub-Treas. Sept. 1, | | | | $52 301,893 |
| " " " " " | | | 1864 | 33,107,000 |
| " " " " " | | | 1863 | 38 011,999 |
| " " " " " | | | 1862 | 37,828,000 |
| " " " " " | | | 1861 | 57 900,000 |
| " " " " " | | | 1860 | 23,500,000 |
| " " " " " | | | 1859 | 26,009,000 |

It will be seen that this city has gathered in from interior boards nearly thirty millions since the 1st of January. We presume that there is more yet to come, but the country at large must now be pretty well drained.—*Journal of Commerce.*

International Bridge near Buffalo.—C. J. Brydges, President of the International Bridge Company, reports to the directors that contracts have been entered into for the construction of the bridge, with the necessary connection with the railways on the Canada side, and also the construction of about seven miles of railway on the American side, to connect the Bridge with the New York Central Railroad, the New York and Erie, and the proposed branch of the Atlantic and Great Western Railway from Salamanca to Buffalo, as well as with the Lake Shore Railroad. The result of these arrangements will be that the bridge will be completed and ready for use by the 1st of May, 1867, a connection made with the Grand Trunk, the Buffalo, and Lake Huron, and also the Erie and Niagara Railway on the Canada side, and with all the railroads, both from east and west, which center in Buffalo on the American side. The contract provides for the construction of a stone and iron bridge, with a double floor, one for the railway, and another for ordinary carriages and foot-passengers.

## MONETARY AND COMMERCIAL.

In the face of many reasons to the contrary, gold has taken a very sudden rise in the New York market, and unsettled the ideas and calculations of many. The Government has been paying its gold interest one month before maturity, and there is said to have been a constant and full stream of gold from the interior, all of which led operators to anticipate a fall. It is doubtful if the advance can be maintained many days, without some better cause than is at present known. This has had the tendency to unsettle business, and produce feverishness in the market.

The market for loans is beginning to feel the pressure of the regular fall trade, and as we approach the usual packing season, we may anticipate that greater stringency will be experienced. It will, no doubt, require a very large capital to handle the pork crop this year, as prices will range high.

Exchange is reported lower, although not in over abundant supply, and is attributable to the shortness of the supply of currency. The following are the quotations:

| | Buying. | Selling. |
|---|---|---|
| New York | par | 75@1-10 prem. |
| Philadelphia | par | 75@1-10 prem. |
| Boston | par | 75@1-10 prem. |
| Baltimore | 1-10 dis. | par. |
| Gold | 145@145½ | 146@146½ |
| Silver | 136@137 | 138@139 |

The following is an exhibit of the National finances on the first of October:

| | Am't Outstanding | Interest. |
|---|---|---|
| Debt bearing interest in coin | $1,116,658,191 80 | $65,001,570 50 |
| Debt bearing interest in lawful money | 1,260,009,120 44 | 72,527,645 75 |
| Debt on which interest has ceased | 1,389,329 09 | |
| Debt bearing no interest | 366,891,093 84 | |
| | $2,744,947,726 17 | $137,529,216 25 |

LEGAL-TENDER NOTES IN CIRCULATION.

| | |
|---|---|
| One and two years 5 per cent. notes | $32,954,230 |
| United States notes, old issue | 392,070 |
| United States notes, new issue | 427,76 .499 |
| Compound interest notes, act of June 30, 1864. | 202,012 144 |
| Total | $678,126,940 |

The foregoing is a correct statement of the public debt as appears from the books, Treasurer's returns, and requisitions in the department on the 30th September, 1865.

HUGH McCULLOCH,
Secretary of the Treasury.

The *Tribune* of Monday says, that railway shares have been strong and in good demand. Reading and Michigan Southern have been very active, and monopolized the attention of the street after the call. There is a large short interest in Reading yet uncovered, and the stock continues to be in active cash demand, and higher prices are looked for. Michigan Southern is strongly held on the large earnings, and great confidence is felt in the property by parties who have examined it. The advance is also stimulated by the large short interest made on the announcement of the division in the guarantee's stock case, and any attempt made to cover would advance the prices materially. The property well managed can be made as valuable as Michigan Central. Rock Island and Fort Wayne were also strong, and but small amounts of stocks would be purchased at quotations. The closing figures were:

| | | |
|---|---|---|
| N. Y. Central | 96¼ | 96⅜ |
| Erie | 88 | 88⅛ |
| Hudson River | 110¼ | 110½ |
| Reading | 116⅜ | 116½ |
| Mich. Central | 114½ | 115 |
| Mich Southern | 70½ | 70⅝ |
| Illinois Central | 128½ | 129 |
| Cleveland & Pittsburg | 73 | 73⅛ |
| Cleveland & Toledo | 108½ | 109 |
| Rock Island | 112⅛ | 111¼ |
| North Western | 28 | 28⅛ |
| North Western, preferred | 62⅜ | 62½ |
| Fort Wayne | 97⅜ | 97½ |
| Ohio & Mississippi Certificates | 28 | 28⅛ |
| Canton | 40⅜ | 40½ |
| Cumberland Coal | 46¼ | 46½ |
| Mariposa M. C. | 12½ | 12¾ |
| Quicksilver | 49¼ | 49½ |

## EUROPEAN AND NORTH AMERICAN RAILWAY.

We are glad to be able to announce, that the contract for completing the entire line of railway from the depot of the Maine Central Railroad in Bangor, to the Suspension Bridge at St. John city, was finally closed on Friday last, with Messrs. George H. Pierce and Albert Blaisdell, contractors.

The delay in consummating the contract has arisen from the fact that the character of the bridge across the Kenduskeag, and of the line through the city, was made subject to the determination of the Board of Railroad Commissioners, by the act of February, 1864. This board, consisting of Hon. Geo. P. Sewall, of Oldtown, Col. A. W Wildes, Engineer, of Skowhegan, and Allen Haines, Esq., of Portland, met in this city on the 23d of August and heard all parties interested, and agreed on an award, which was made known to the company on Friday, and estimates based on their award submitted to the contractors, who are to build the entire line, including the bridge across the Kenduskeag and the grading of Front street. This one mile from the Maine Central depot to the point of rocks at Newbury street, has always been a hugbear in the way of a railroad up river, from the difficulty in forming a connection with the western road. The award of the Railroad Commissioners will do much to relieve the anxiety of our people in relation to the harbor, for it requires a truss bridge on piers, with open spaces or spans of not less than 100 feet each, and two draws of 38 feet each.

It is a favorable circumstance that the expense of the heavy excavations required through Front street, is now offset by the demand for all this material, to fill in the new steamboat wharf, just undertaken by the owners of the Katahdin steamer.

A contract between the railway company and the city of Bangor, secures a commercial avenue or street 90 feet in width, from the Maine Central depot to the west line of French street, a distance of nearly half a mile.

Col. Pierce, one of the contractors, passed over the line with the President and other Directors of the company on Friday, as far as Passadumkeag. They will commence work as soon as the $500,000 of new stock is subscribed, as contemplated in their contract On the completion of this subscription of $500,000, the entire capital is secured for completing the line from Bangor to St. John City. —*Bangor Whig, Sept.* 11.


# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI | 9:00 A. M. | 10 40 P. M. |
| HAMILTON | 9:57 " | 11:43 " |
| DAYTON | 11:30 " | 12:55 A. M. |
| SPRINGFIELD | 12:35 " | 1:45 " |
| URBANA | 1:40 P. M. | 2:15 " |
| GALLION | 5:25 " | 6:10 " |
| MANSFIELD | 6:50 " | 7:15 " |
| AKRON | 9:30 " | 10:00 " |
| RAVEN A. | 10:05 " | 0:40 " |
| LEAVITTSBURG | 1:00 " | 11:40 " |
| GREENVILLE | 12:15 A. M. | 1:0 P. M. |
| MEA VILLE | 1:20 " | 2:30 " |
| CARRY | 2:45 " | 3:55 " |
| Arrives SALAMANCA | 4:58 " | 2:55 " |
| NEW YORK | 10:30 P. M. | 1:00 " |
| BOSTON | 2:30 " | 8:00 A. M. |
| PITTSBURGH | 2:20 A. M. | 3:20 P. M |
| HARRISBURG | 1:30 P. M | 2:45 A. M. |
| PHILADELPHIA | 5:30 " | 6:55 " |
| BALTIMORE | 5:55 " | 7:00 " |
| WASHINGTON CITY | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat offices. in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D McLEAR }
J. P. SARVER, } Passenger Agts
CHAS. COOK, }

# COUPON AND LOCAL TICKETS!

CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

CONSECUTIVELY NUMBERED

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD


## RAILROAD OFFICES AND AGENTS.

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St.

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A B Waters, Freight and Ticket Agent, Cor. Third and Walnut.

**Ohio & Mississippi**

W. E Bruce. Freight and Ticket Agent, Oagette Building, 82 West Fourth Street
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark. Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg Contracting Agent, Vine St. under Burnett House
H J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent, ", "

**Central Ohio & Pittsburg, Columbus and Cincinnati.**

James E Shields, General Agent, No. 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Oettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A. J. Dey. S. W Passenger Agent, No. 4 Merchants' Exchange.
G. O Cooke, Local Passenger Agent, No. 4 Merchants' Exchange.

**Hannibal & St. Joseph.**

J W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St under Burnet House.

**New York Central.**

O. B Gibson S W. Passenger Agent. W. H Page Local Passenger Agent, 8 and 9 West Third St.
Geo S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Pittsburgh, Fort Wayne and Chicago.**

H W. Brown & Co., Contracting Agents, Broadway, opp Spencer House.

**Baltimore and Ohio.**

H Heckert, Gen. Western Agent, No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.

Best Route to St. Louis and Chicago

**MONDAY, OCT. 31.**

## Indianapolis and Cincinnati



## RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10: 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawranceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House. Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt.

---

## BENJ. H. LATROBE AND C. H. LATROBE,

## CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

**LAW BUILDINGS,**

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also, the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.
J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

---

**Change of Time, Monday, Aug. 7th.**

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:20 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

---

## *STEAMSHIP COMPANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side-wheel STEAMSHIPS, between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | | |
|---|---|---|
| WASHINGTON..... | 3,204 tuns, | 900 horse-power. |
| LAFAYETTE..... | 3,204 tuns, | 900 horse-power. |
| EUROPE..... | 3,254 tuns, | 900 horse power. |
| FRANCE..... | (afloat), | 900 horse power. |
| NAPOLEON III..... | (afloat), | 11,00 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its equivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to
GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

---

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building)..... | 3,412..... | ——— |
| ENGLAND (now building).. | 3,430..... | ——— |
| SCOTLAND (now building) | 3,430..... | ——— |
| ERIN..... | 3,310..... | Grace. |
| HELVETIA..... | 3,315..... | Prowse. |
| PENNSYLVANIA..... | 2,872..... | Grogan. |
| VIRGINIA..... | 2,872..... | Lewis. |
| LOUISIANA..... | 2,166..... | Axplett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to

**WILLIAMS & GUION, No. 71 Wall street.**

For stecrage passage apply to
640* WILLIAMS & GUION, No. 29 Broadway.

---

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,

Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN..... | $90 00 | STEERAGE..... | $30 00 |
| First Cabin to London.. | 95 00 | Steerage to London. | 34 00 |
| First Cabin to Paris.... | 105 00 | Steerage to Paris.... | 40 00 |
| First Cabin to Hamburg | 100 00 | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenstown, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

---

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR..... 2,595 65-95 tuns.
WILLIAM R. BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge.

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Haere, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
640* JAMES A. RAYNOR, No. 10 Barclay street.

---

## CENTRAL RAILROAD

—OF—

## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

---

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:15; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a.m. (Ex.); 3:00 (Ex.) 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

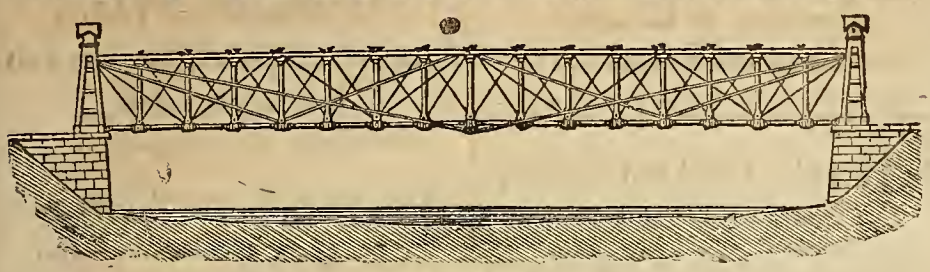
---

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York, Brooklyn. Baggage checked from the residence points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '63, 1y. Letter Box, 1392. C. J. SCHULTZ, Pittsburgh, Pa.

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS O

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets ..., ...ch Screws, and Thresher Teeth, made on short notice Ad on the most favorable terms. Nov 27,1y

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines. 419 y1

## KNOX & SHAIN,

**Engineering and Telegraphic**

INSTRUMENT MAKERS,

**PHILADELPHIA.**

## JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES**

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

**Either Single or Double Plate,**

**With or without Axles.**

**WHEELS FITTED**

**To Hammered or Rolled Axles,**

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

## Manufacturers, Importers & Dealers

—IN—

**RAILROAD, CAR,**

—AND—

**MACHINE SHOP**

**SUPPLIES,**

—AND—

**MACHINERY OF EVERY DESCRIPSION**

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

RAILWAY SPRINGS.

**FREIGHT**






**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

**W. M. F. HEWSON,**

## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock. Bonds and other Securties on commisson only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by w rrunning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

### CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest Central West and Southwest. At Harper's Ferry with the Winchester road At Washington Junction with the Washington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimor*
J H SULLIVAN, *Gen. Wes Ag't. Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 01 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M. |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M. |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 5 P. M. |
| Hamilton Accommodation | 7 [illegible] P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 10 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 0 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Ibuses call for passengers.

## Change of Time.

SUNDAY, JUNE 19, 1865.

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville Evansville, St. Louis. Cairo, St. Joseph; Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | | |
|---|---|---|
| Louisville, St, Louis and Cairo Depart. Mail | 7:20 A. M | Arrive. 8:00 A. M. |
| St Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train on Sundays, through to St. Louis and Cairo at 7:50 P M

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 89 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent.

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill. on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train eaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis Lafayette, Springfield Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicagn Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets. good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill. on Front street. where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD. President,
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON. Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Sp. 2 MOSELEY & CO.

BOSTON, MASS

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State. possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¾ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

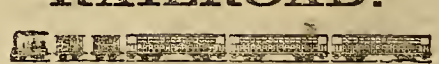
**Cast Iron Gas or Water Pipe**—4 to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M night.

On Sundays, 4.30 A M; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.44 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points E West

WM. EARNS SUPT

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, OCTOBER 12, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| *Little Miami—* | | |
| Morning Express | 6:00 A. M. | 7:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 4:31 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 10:05 A. M. |
| Morrow Accommodation | 5:20 P. M. | 7:45 A. M. |
| *Atlantic & Great Western—* | | |
| Morning Express | 9:40 A. M. | 7:30 A. M. |
| Night Express | 10:50 P. M. | 6:30 P. M. |
| *Marietta & Cincinnati—* | | |
| Mail and Express | 8:00 A. M. | 7:00 P. M. |
| Accommodation | 3:30 P. M. | 11:00 A. M. |
| *Cincinnati, Hamilton & Dayton—* | | |
| Dayton & Sandusky | 7:00 A. M. | 5:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:45 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Toledo, Detroit and Huntsville | 5:00 P. M. | 12:50 P. M. |
| Richmond and Chicago | 6:00 P. M. | 12:25 A. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| do do | | 7:55 A. M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M. |
| Indianapolis & Cambridge City | 6:00 A. M. | 10:05 P. M. |
| " " | 4:00 P. M. | 12:25 P. M. |
| Eastern Night Express | 10:50 P. M. | 7:50 A. M. |
| Mail and Express | 9:40 A. M. | 6:30 P. M. |
| *Indianapolis & Cincinnati—* | | |
| Springfield and St. Joe Express | 1:00 P. M. | 5:07 P. M. |
| St. Louis and Chicago Express | 10:00 P. M. | 5:00 A. M. |
| Lawrenceburgh and Harrison Accommodation | 5:15 P. M. | 8:20 A. M. |
| Harrison Accommodation | 9:30 A. M. | 8:40 P. M. |
| Chicago and St. Louis Express | 7:15 A. M. | 9:00 P. M. |
| *Cincinnati & Indianapolis Junction.* | | |
| Connersville, Cambridge City & Indianapolis Mail | 6:00 A. M. | 10:00 P. M. |
| Connersville, Cambridge City & Indianapolis Express | 4:00 P. M. | 12:25 P. M. |
| *Ohio & Mississippi—* | | |
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A. M. |
| St. Louis, Cairo and Louisville | 7:50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3: 5 P. M. | 1:50 P. M. |
| *Cincinnati, Wilmington & Zanesville—* | | |
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4.00 P. M. | 7:45 A. M. |
| *Kentucky Central—* | | |
| Morning Express | 6:00 A. M. | 10:12 P. M. |
| Evening Express | 2:35 P. M. | 6:00 A. M. |

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is seven minutes fasterthan Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapoli & Jincinnati Roads, are run by Vincennes me which is 12 to 1 slower than Cincinnati time.

## FINANCIAL RESULTS OF GREAT RAILROAD LINES.

FROM EAST TO WEST.

It is quite remarkable (but we believe always true) that nature points out where the great lines of traffic and locomotion must be, notwitbstanding all the changes and improvements in locomotion, which art creates in the progress of invention and civilization. We bave before alluded to this faet in the supremacy even now of tbe great Pennsylvania route througb Philadelphia and Pittsburg. In the early settlement of the country, when the great current of navigation set westwardly, there were neither steamboats nor railroads; and the Allegheny range of mountains presented great obstacles to any road: but nature had pointed out the great line through the valleys of the Juniata, the Allegheny and the Ohio. What was to be done? What was needed? From the Atlantic States having the great seaports on the Hudson, the Delaware and the Potomac, the stream of navigation must run on tbe most direct line to the vast and fertile valley of the West. It must reach, first, a *navigable water* in that valley. If there were no steamboats, there were arks and keel boats (as the pole barges were called) to receive the emigrants and merchandise, and bear them to points hundreds and thousands of miles down the great valley. Thus, *seventy years ago*, did the great stream of western immigration roll on. Tens of thousands came over the Alleghenies to Pittsburg and over Braddock's road to Wheeling. The volume of migration was (in proportion to the population of tbe country) even greater than it is now. In one year, more than seventy years ago, twenty thousand people and seven thousand horses and wagons passed Fort Harmer, on the Ohio, going to the Miami country, the lower Mississippi and Kentucky. The population of the country is now seven times as great, and that volume of immigration was equal to one hundred and forty thousand now. Down to 1825, the great road, from Philadelpbia to Pittsburg, was crowded with great six-horse wagons carrying tons of merchandise, and making almost a continuous caravan. When canals were introduced, Pennsylvania made canals on the Susquehanna and Juniata, and the passage of the mountains was made by a railroad with inclined planes. This was an awkward and expensive mode of transportation. New York had just completed her Erie canal, and Ohio her canal. Altbough the route by Lake Erie was far round and unnecessary; yet, for the time being, the New York route had the preference, and the great stream of commerce, even to the valley of Ohio, went round by the lake! This was unnatural and unnecessary; but it continued simply because in the new improvements of locomotion, the New York works were, at each stage, a step in advance. If we could imagine some new improvement in locomotion, equal to that made by railroads, New York might be again in advance, but this is improbable, and even impossible. Things must (and to a great degree have) resume their natural level In that case, we lay it down as an *elementary principle*, that whatever may be the *mode* of locomotion, the *through* traffic will take the NATURAL ROUTE. Whatever was the natural route for wagons, will be the natural route for any other mode of conveyance, when they are all reduced to their ultimate principles. We do not mean to-day that the natural route from New York to the basin of Lake Erie, will be the same with that from New York to tbe valley of the Ohio. That is geographically improbable. But the current of transportation to either of these will be on the natural route. Not only this, but the financial results in the end will show this. We have now four great lines o transportation from the east to the west, viz the New York Central, the Erie and Grea Western, the Pennsylvania Central, and the Baltimore and Ohio.

The following table of financial results, on the first three, shows the *relations* of gross business on each route:

*Earnings of the Pennsylvania, New York Central, and Erie Railways for eight years:*

| Year. | Penn. R. R. | N.Y.C.R.R | Erie R. R. | Total. |
|---|---|---|---|---|
| 1857 | $4 855 669 | $8,027 251 | $5,420,606 | $18,303,526 |
| 1858 | 5,185,430 | 6,528,412 | 5,151,606 | 16,865,348 |
| 1859 | 2,302 355 | 6,210,848 | 4,594,527 | 15,957,730 |
| 1860 | 5,932,791 | 6 957,441 | 5,180 229 | 18,070,261 |
| 1861 | 7.300,000 | 7.309,012 | 5.590,516 | 20,199,958 |
| 1862 | 10,301 290 | 9.356 827 | 8,400,334 | 28,061 451 |
| 1863 | 11,291,412 | 10,897,889 | 10,169,481 | 32,958,524 |
| 1864 | 14,759,057 | 12,997,889 | 13,295,619 | 41,052.565 |

This table presents some extraordinary and instructive results. The relative increase of business on these several routes is as follows, viz:

| | | |
|---|---|---|
| Increase of seven years on the | N. Y. Central | 60 per cent. |
| " " " | Erie Railroad | 150 " |
| " " " | Penn R. R. | 200 " |

We see here the principle we have stated clearly illustrated. The business of these roads has increased in the *increase ratio* o their *directness to the Ohio Valley;* and there is nothing in the future, now visible, at all likely to change that result. The aggregate increase of receipts on these roads were:

| | |
|---|---|
| New York Central | $4,970,000 |
| Erie | 7,775,000 |
| Pennsylvania Central | 9,904,000 |

It may be observed, however, that the Pennsylvania road is now working the Erie and other branch roads; but the same thing may be said of the New York roads. Their tributary roads, however, only make local conveniences, and do not change the great current east and west. The true result we see in the above figures. All the improvements of art being completed, their several advantages have come to a level in everything, except the *natural* advantage; and this again resumes its influence. The direct route to the valley of the Ohio, from New York, is through Pittsburg; and the obstacles which the mountains

once interposed are taken away, by the art of engineering, in the construction of railroads. One passes over the Alleghenies now without knowing it; nnless in the daytime the eye rests on these high and rugged mountain sides, where the road approaches the tunnel; and scarcely any difference of speed is made, even where the grade is the greatest. It has been thought that it was best (and assuredly it is the cheapest) to take the valleys of water courses, no matter how far round they may go. But we have now a practical demonstration that the direct route is preferred by the public, and is most profitable.

In the above table we have no account of the Baltimore road; but it is observed that as between tide-water and the Ohio, the Baltimore route is the most direct; but as between New York and the Ohio, there is no material difference. Should Baltimore (as it no doubt will) take advantage of its position as an Atlanitc port, it may yet rival New York in the direct trade to Europe. The results of such enterprise can not now be known; but will undoubtedly work great changes.

## RAILWAY COMPANIES NOT RESPONSIBLE FOR DAMAGES TO PERSONS CROSSING THEIR TRACKS CARELESSLY.

In the case of Moses Goodrich *vs.* the Eastern Railway Company, which has recently been decided in the Supreme Judicial Court of Massachusetts, before Judge Hoar, the following abstracts of the facts and charge of the Court will be interesting:

In this case, which was on trial for nearly a week, the plaintiff sued for $10,000 for injuries received at the Chatham street Crossing, in Lynn, where the railway crossed the highway on the same level, by defendant's carelessness.

It appeared that the plaintiff, a butcher, was driving along Cbatham street in his covered butcher wagon, with a steady horse, at a slow gait, and, as he stated, looked but seeing nothing coming, drove on till he found he could neither cross nor back when the train was upon him; his borse was killed, his wagon smashed up, and he himself stunned so that he lay senseless and was likely to die for a month, and did not get out for nearly eight months, and bis brain was permanently injured. It appeared that the train was a train of five cars loaded with stone going, as defendant's witnesses testified, not more than ten miles per hour, but as plaintiff contended, more tban twenty; that there was no flagman or gate at the crossing, no brakeman on the rear of the last car, and that the whistle was not blown at all, or, if at all, only at the instant of the accident.

Defendant offered evidence to show that plaintiff was habitually a careless driver, which was admitted and excepted to by the plaintiff.

Judge Hoar charged the jury that such an injury must happen in one of four ways: either through the carelessness of tbe defendant; or of the plaintiff; or of both; or of neither of the parties; that the plaintiff could only recover in the first case, by satisfying the jury that the injury was caused solely by tbe carelessness of the defendant.

If the defendant omitted to observe the statutory requirements, and such omission contributed to any extent to the injury, that was carelessness on its part But the omission must somehow contribute to the accident. Suppose that the plaintiff had offered evidence to show that there was no sign-board. It appearing that the plaintiff passed there several times a day, and as he said, was thinking of the train and engine at the time, it would be utterly immaterial whether there was or was not a sign board, the object of which was to notify strangers and remind others of the crossing So of the bell and bell post. If the jnry were satisfied that the bell was not rung, and that if rung it would have prevented the accident, and the plaintiff was careful, the plaintiff might recover, but it was utterly immaterial if the ringing post was not eighty rods from the crossing, if the bell was uot rung at all, as the plaintiff alleged, or was rung all the way from Swamscott, as defendant said. The statute requires that a brakeman and brake shall be on the rear of the last car of all freight trains. There was none on this That statute was passed on the occasion of the parting of a freight train on an up grade, whereby the cars ran down back and did great damage, at Springfield. But in this case the practical question is, was this accident caused by the omission of that statutory requirement? If it was, the defendant was negligent. But if the collision would have happened the same without it, if the plaintiff had what was better than a brake on the rear of the last car, and what under all circumstances was reasonable in the way of brakes on the engine and on the tender, that omission was immaterial.

The defendant's case ought no more to he prejudiced by any acts of omission or commission which did not cause this injury than sbould the plaintiff's if the defendaut could show that the plaintiff had cheated in the weight of meat.

The rules and regulations of the road stand on different grounds. Tbe regulations require the whistle to be sounded on coming to a crossing. The statute does not. The statute does not fix or limit the rate of speed. The rules of tbe road provide that the average speed of freight trains shall not exceed twelve miles per hour, and Mr. Derby, (plaintiff's counsel,) who has himself been a witness, states that the customary rate is eleven or twelve miles. The statute does not require a gate or flagman at the crossing unless ordered by the town The regulations forbid any one riding on the engine beside the engineer, except it be the conductor, unless by permission of the snperintendent. It appeared that the whistle was not sounded; there was no gate or flagman; and Mr. Cram was riding on the engine. The plaintiff contended the speed was over twenty miles an hour.

The rules and regulations of the road are matters of their own internal management; —not between them and travelers, who may know nothing of them and who could not act on them, unless they were brought to their notice and relied on by them. But the defendant was bound to take all reasonable precautions, exercise all reasonable care, and avoid accident if possible, whether the things needful in this were required by their rules and regulations or not. If under all the circumstances common prudence required the defendant or its servants as reasonable persons, to do anything required by the rules or not, that they were by law bound to do, and the omission to do anything required by their rules and regulations would not be carelessness on their part, unless the omission caused the injury and was imprudent in itself. Defendant was not restricted to any rate of speed, and it was no matter what was the speed of the train on this occasion unless it was an unreasonable rate which caused the accident.

The question was purely one of fact, whether the defendant had arranged the crossing and run as reasonably bonnd to do. If they had omitted or done anything which common prudence required, and caused the accident thereby, it was carelessness on their part.

II. But defendants were not liable to plaintiff for their carelessness unless he proved himself to have been careful.

Each party is under the same reciprocal obligation to exercise due care in managing its vehicle. The phrase of the law is "ordinary care," but *reasonable care* is a better term. It is not the ordinary care which the traveler may use in crossing a common highway, but such care as persons of prudence exercise in like circumstances in crossing such a track. The traveler is bound to get out of the way because his vehicle is under his control, whilst a train moves in a fixed track and with vast momentum. So the vessel which can is bound to give way to one which cannot change its course. Plaintiff's carelessness would be a defence, and if that contributed to or caused the accident, the plaintiff cannot recover.

Verdict for defendant.

E. H. Derby and W. C. Williamson for plaintiff; C. M. Ellis for defendant. — *Railway Times.*

## RAILROADS IN SOUTHERN STATES.

The Georgia State Road.—Preliminary to the reception of the State, or "Western and Atlantic Railroad," by Governor Johnson from the military authorities, who have had, and still have charge of it, in accordance with negotiations still pending between the Governor on the part of the State, and Major-General Thomas, on the part of the Government, the following appointments have been made by Governor Johnson:

Directors—Richard Peters, of Atlanta; Robert M. Goodman, of Marietta; J. R. Parrott, of Cartersville; Robert Boty, of Dalton; W. L. Whitman, of Ringgold.

Superintendent—Robert Bangh, of Atlanta.

Treasurer—Miles G. Dobbins, of Griffin.

Should the road, which has not yet been turned over to the State, but which it is believed will be, then the foregoing named gentlemen will constitute the principal officers to whom its conduct will be entrusted. Most of them are widely and favorably known to the people of Georgia—all of them are entitled to public confidence. Governor Johnson has been fortunate, in these trying times, to secure the services, for the State, of gentlemen who are "without fear, and beyond reproach."

Major-General Thomas, under directions from the War Department, has proposed to turn the road over to a "board" composed of "true and loyal directors," whom he can conscientiously approve of and accept, and upon the further conditions that bonds shall be given, and account shall be taken of expenditures, receipts, etc. These terms have been complied with by the Governor, and the board is now proceeding to comply therewith. When consummated, the road will again be under the control of the State, and not until then.—*Augusta (Ga.) Constitutionalist.*

The Macon and Brunswick Road.—We learn that at a meeting of the Board of Directors of the Macon and Brunswick Railroad,

arrangements were made which would insure the completion of that important line to Hawkinsville by the 1st of November next. The work can be done if the proper energy is expended; and as railroad communication between this city and Hawkinsville would greatly benefit both points, we hope the liveliest anticipations of the directors may be realized.—*Macon Telegraph.*

The Memphis and Charleston Road.—The eastern division of the Memphis and Charleston Railroad, has been turned over by the Government to the company, and Mr. Tate left here on the 4th for Memphis, to receive the western division. A very satisfactory and liberal arrangement was effected with the Government. The cars now run to Iuka from Memphis. Hands are working from that point towards Tuscumbia, and also from Decatur. The road will be completed through in about sixty days, except the Tennessee river bridge at Decatur, and until it is finished a boat will be used to transfer passengers and freight.—*Huntsville (Ala.) Advocate.*

The Rome Road.—This road was turned over to the company some three weeks since, and under the charge of the indomitable and persevering superintendent, C. M. Pennington, and the former obliging and attentive conductor, C. A. Smith, the business of the road is progressing finely.

The Montgomery and West Point Road.—The guage of the Montgomery and West Point Road is to be widened to the usual width of other roads. Mr. Pollard, the president, is now at the North, and has bought one splendid train of passenger cars, and perhaps more, to suit the new gauge. The present cars and engines can be altered at a very small cost. Mr. Crane, one of the best superintendents in the country, lately said that he intended to have the finest road in the South.—*Col. (Ga.) Sun.*

The Rome and Jacksonville (Fla.) Road.—This road, that is to connect Rome with Jacksonville, ought to be completed as soon as possible. We understand that the work of completing the Selma and Tennessee River Railroad to Jacksonville will soon be commenced, and be pushed on rapidly even to completion, in a few months at farthest.

This is one of the most important links in the whole chain of railroads in the United States, constituting, as it does, a part of the shortest and best route between New York and New Orleans. For about two-thirds of the distance over this broken link, the road is already graded and nearly all the bridges and culverts built.

About $80,000 in gold have been expended between Rome and the Alabama line, and is it possible that the stockholders are going to lose that and also the untold advantages of this road to themselves and the whole country without even an effort to save it? It seems to us the easiest thing imaginable to have this road completed at a very early day. Not by Southern capital, to be sure, but by Northern. It is now flush times at the North, and there are millions upon millions of dollars there seeking profitable and permanent investment. Why not have a meeting of the stockholders and resolve to sell the road after extensive advertising in Northern papers; or, perhaps it may be deemed better to send an agent there to sell it or borrow money to complete it, or do whatever else the stockholders or directors may deem for the best interest of all concerned.—*Rome (Ga.) Courier.*

The Macon and Western Road.—All the railroads leading from this city are at present doing a reasonably fair business. A train seldom leaves without its cars pretty well filled with passengers, and those arriving are generally loaded. The Macon and Western road (to Atlanta) particularly, we understand, is doing business just at this time which will nigh equal the average amount due previous to the interfercnee with their operations by the war. That company has given notice that from to-day a night train will be placed on the road. This will be a great convenience to travelers, as they can now leave this place either morning or night, as they may wish to stop over in Atlanta, or make the connection with trains from that city for the North or West.

Richmond and Petersburg Railroad.—The President and Directors of this road have succeeded in effecting a loan, and intend to go to work with a will to put the road in its former condition. New engines and cars will be purchased and put on this road just as soon as they can be had.

The Montgomery and Eufaula Road.—The Montgomery and Eufaula Railroad, at the commencement of the war, was graded to within a short distance of Union Springs. The iron had been contracted for, and part of it had arrived. Six miles of the road were completed, and a locomotive and twenty cars running over it. But on the breaking out of the war operations were suspended, the track was torn up, the iron sent to Meridian, and the rolling stock transferred to the Alabama and Florida railroad. This road will run through a rich agricultural country, and form a direct route to Charleston and Savannah. The company have resumed operations, and a small force (which will shortly be increased) is employed regrading the road. The company intend to have the road completed at as early a day as possible.—*Macon Telegraph.*

## THE HOOSAC TUNNEL.

This project, which has engaged the attention of the engineering fraternity and the people of this State generally for the past sixteen or seventeen years, is not progressing favorably, if we may believe the reports of those who have visited the works, and particularly the facts given in a pamphlet written by Hon F. W. Bird, of the Governor's Council. The project itself, if it can be carried out at any reasonable degree of cost, will be of great value to the commercial interests of the State, as it promises to reduce the distance and cost of transport between the Eastern terminus of the Erie Canal and tide-water at Boston very materially. The distance now between these important points is 200 miles *via* the Western Railway. If the Hoosac tunnel should be built, the new route would be about 23 miles actually shorter; and as the grades and curvature on the tunnel route are less than on the Western Railway, by equating these elements on the two lines to a common standard—cost of motive power and operation—it is claimed that, *practically*, the new route will be about 41 miles shorter. This is the basis of the claim upon the State for aid to construct the tunnel, outside of the local claims of Franklin county; the inhabitants of that county claiming that the State having aided the building of the Western Road, is in fairness bound to aid in building the new line. We have long favored the construction of the tunnel, and have thought the claim for State aid should be allowed to a fair and reasonable amount, especially if such guarantees could be given for that aid as would make the State reasonably secure, as in the case of the Western Road; but most certainly we never favored the State taking the entire work on its hands. Independent of the objections to more State ownership in works of public improvement, which we hold to be vicious in principle, are the questions of the economy of construction. The State official or commissioner, as the case may be, is not likely to be governed in his expenditures so strictly and wisely withal, as he would be if his appointment was made by persons who had a personal interest in keeping down the amount expended. Works constructed by Government are notoriously far more costly than those constructed by private parties, even when the structures are of equal excellence.

The Hoosac tunnel was at first engrafted upon a corporation known as the Troy and Greenfield Railroad Company, and the aid of the State for the construction of the tunnel was asked by that Company. The contractor of the tunnel in time became the Company, wielding its votes, its corporate capacity, and all other machinery by which men were elected Governors, senators, councillors, etc., to subserve the interests of the tunnel or its particular friends. The tunnel interest became a power in the State and weak-kneed politicians from every section of the State were found to be friendly either from motives of fear or interest. The original project, under the sinister influence of the contractors, had decreased from a double-track tunnel down to a mere hole in the mountain, and the capacity of the tunnel was reduced in about the same ratio as the contractor enlarged his demands for State aid. Finally, the matter became utterly ludicrous as well as disgusting to fair men, and means were found for stopping the aid from the State Treasury. The contractor then stepped aside, and the State assumed the charge of the project, appointing three commissioners to superintend and direct the work. The Commissioners, after full consultation with the best engineering talent of the country, and after the return of a competent agent from Europe, who had been sent there to procure the results of tunnel experience there, laid out the work upon the scale demanded for a double track through the mountain. After an experience of about one year and a half, and the expenditure of about a million of dollars, including some $200,000, for damming the Deerfield river to secure power to drive the drills, supply air and to remove the debris of the tunnel, it has been found that very little substantial results have been made. The writer of the pamphlet assumes that the chairman of the Board of Commissioners, who has had entire direction of the enterprise, has shown great deficiency in good judgment and economy in many particulars; that the assumption by the Commissioners that their judgment is final as to the amount of money to be expended and how and when it is to be expended, is illegal and wrong; and that the interests of the State require that the enterprise should in future be conducted under different management; that the dam upon the Deerfield river, which was supposed to secure 800 horse power, is now only able to give about fifty horse power, and that steam power could have been used at a great saving; that the size of the headings are even less than those driven by Mr. Haupt, and in this respect directly in conflict with the programme of the Commissioners, and the expectations of the public; and finally, that the obstacles encountered at the west end of the tunnel are such

that the work must be given up unless the State decides to put in many millions of dollars over the original estimates, and extend the time of construction beyond a generation. The obstacle found at the west end is something new, and is merely the decomposition of the rock when exposed to the air and water. After a short exposure it becomes a kind of paste or "porridge," and can neither be pumped, shoveled or drained out. By sinking shafts at different points it is found that the same material or "demoralized rock" is found for some 2,300 feet, and the work has in consequence been stopped. This is certainly an interesting engineering question to the profession generally, and it is a question of personal interest to the tax payers of the State. Sincerely desirous as we have been for the construction of the Hoosac tunnel, satisfied that its benefits—giving a second double track railway line to the Erie basin—would justify the outlay of the large sum estimated by the Commissioners, between five and six millions of dollars, we still think that common prudence should be exercised under the present perplexing circumstances, and the large expenditures stopped until the present ugly problem has been considered by engineers whose practical experience in tunnel work may help solve it.—*Railway Times.*

## THE NATIONAL BANKS.

There appears to be no reason for doubting that application will be made to next Congress for authorization to organize a larger amount of national banking capital than is provided for under the law as it now stands. The $300,000,000 authorized by the existing law, is all taken up within the States we have been wont to designate loyal. The South is, therefore, without any provision for national banking institutions; and, unless further authorizations be granted, that section must establish banks under the State regulations, with their circulation subject to a crushing tax of 10 per cent. per annum. Some of the States are dissatisfied with the apportionment of capital made to them by the act of Congress and are prepared to ask for authority to establish more banks. It is rumored in financial circles, that Congress will be asked to authorize the organization of additional banking capital to the extent of $300,000,000; and it is understood that Jay Cooke is among the advocates of this large demand. Already, we have sufficient evidence of the folly of Congress attempting to prescribe the limits of banking. It appears first to have mistaken the extent of the banking requirements of the country at large, and then to have erred in its distribution of the capital among the several States, some having a larger authorization than they require and others less. Thus early, we have a demonstration of the bad policy of the national legislature attempting to regulate matters which are far better managed by the voluntary action of the community. It is much to be hoped that Congress will profit by these initial failures, and instead of granting the authorization of any specific additional amount of capital, simply repeal the clause of the banking act limiting the amount of circulation to $300,000,000. This would leave room for any further extension of banking required by the commercial wants of the country, and our banking system would be adjusted not according to any preconceived estimates of incompetent judges, but by the demands of those who are certainly the most competent to form an opinion,—the people themselves. The assumption that members of Congress are better able to judge how much banking capital the country requires than the community, is not only anti-democratic, but obviously absurd. The question,—how much banking capital does the country require,—is one involving an infinitude of detail, and which no government can solve or ought to attempt to solve. The capitalists of a given locality are the parties best able to judge whether a bank is needed among them; and if they conclude that there is a fair chance for a bank being supported, we apprehend there are no persons qualified to reverse their decision, upon the ground of a better acquaintance with the facts of the case. It may be said that it is necessary for Congress to impose some limit to the extension of banking, lest we should have a banking inflation and consequent panics. But is not Congress just as liable to determine upon a dangerous limit as the people are to rush into excessive banking if left to voluntary action? What data has Congress by which to determine how much banking capital the country requires? None whatever. On the other hand, it is just as possible that Congress may repress commerce by fixing too narrow a limit for banking operations. Unless Congress can be sure that it knows just how much banking accommodation the country requires, it assumes a dangerous prerogative in prescribing any limits to banking. There is really no danger of over-banking, providing the banks be left entirely free. It is when the government steps in, with compulsory measures, against the interests of the banks, that danger arises. The self interest of the community and of the banks, will far more effectually check any bad tendencies than any straight-laced system provided by law. There are, however, a majority in Congress who think that the government is much more competent to manage our affairs than we ourselves are; and it is useless to hope for anything free, within the whole round of commerce or finance, so long as this delusion controls our affairs. The utmost that can be hoped for is that Congress will interpose no obstacles to a free redemption of national bank currency. If the plan of redemption proposed by the banks of New York, Boston and Philadelphia be adopted, it is quite immaterial what amount of circulation may be authorized by Congress; for, under that system, the moment there was any redundancy of circulation the notes would be returned to the issuers for circulation.

There can be no doubt that a large majority of our banks will unite on a plan for enforcing redemption. This is anticipated by the party in favor of a currency inflation; and hence, to defeat this check upon expansion, they propose asking Congress to make all national bank notes a legal tender. After such evils as we have seen to grow out of making Treasury issues a legal tender, it would seem that we ought to be safe against any attempt to further vitiate our monetary system. But the fact is that our banking and fiscal affairs have fallen into the hands of a class of men who favor the revival of all the exploded errors in political economy, who would bind everything in governmental fetters, and who yet are so blind and resolute that they can learn no wisdom from their own manifest failures.—*Economist.*

Who does Congress represent? The people. Is it anti-democratic for the representatives of the people, to represent their financial as well as their political interests? Is it not the people who manage their own affairs, when they manage them by their representatives? The simple fact is, the bankers and politicians at New York want to manage the financial affairs of the whole nation. The New York plan of redemption is unpopular throughout the country, for it is an attempt to concentrate all money affairs in New York. So far as the laws of commerce do this, very well, but let it not be attempted by *combinations.* If it is, it will result in a commercial convulsion at New York, which will hurt those who try it.

## THE COAL TRADE OF PITTSBURG.

In the five pools of the Monongahela slackwater, sixty-nine collieries were opened since 1845 The number of acres embraced in these collieries is 12,094, and are valued at $4,089,875; the value of houses, $795,500; live stock, $76,775; tools, cars, etc., $141,145; other improvements, $582 700. The number of hands employed is stated at 3,485, and the total population of the collieries of the Monongahela at 16,950. Fifteen tow boats, valued at $322,000, are immediately connected with these collieries, and 164,290 yards of track are used in operating the mines. The cost of mining and loading the coal ready for transportation to market, has ranged from $3 50 in 1861 to $7 in 1865 per hundred bushels. The total amount of coal produced at these collieries for home consumption and exportation, from 1845 to 1865, aggregates 336,732,263 bushels, or 13,097,581 tons.

The collieries of the Youghiogheny are the next in interest, and the deposit is a distinct basin, lying four hundred feet above the Pittsburg seam. A portion of the coal taken from the mines is necessarily included in the statistics of the Monongahela district, but the following figures will show the amount transported by the Connellsville Railroad Company to Pittsburg. Along the line of the railroad there are twenty-two collieries, embracing 3,929 acres of coal land, valued at $943,825. The value of houses is given at $108,400; cars, tools, etc., at $36,500, and other improvements, $57 600. The number of hands employed is given at 839, and the total population at 4,195. The live stock is valued at $12,400. The cost of mining is about the same as that of the Monongahela district. There are also seven other collieries using the Connellsville road, from which no statistics were obtained. The total amount of coal transported over the Connellsville Railroad from the twenty two collieries for the past five years, aggregates 9,345 544 tons. The portion shipped by the slackwater is, of course, not included, the amount being given in the statistics of that company.

The city collieries embrace the mines in the hills immediately adjoining the city, and number ten works. The area of ground is given at 1,570 acres, and the value $1,256,000. The estimated value of the houses is $208,000, that of other improvements at $500,000, the cars, tools, etc, at $49,500, and the live stock at $50,000. The number of hands employed is 1,240, and the population belonging immediately to the collieries, 5,765. Many of the collieries are connected with the rolling mills, and are worked exclusively for this private consumption. The exact amount of coal mined could not be obtained, but from various sources it is estimated that the amount produced during 1862-3-4, will aggregate 8,387,500, all consumed at home.

The collieries of the Pennsylvania Railroad form another important division of the coal

trade of Pittsburg. Several of the mines along this road, which might be properly classed as belonging to that branch of Pittsburg industry, are omitted, nearly all their coal going east. There are, however, a number of firms, the product of whose mines is principally brought to our city for market. The number of acres embraced in these is given at 1,045; valued at $3,630,000; the value of the improvements, other than houses, $104,000; tenements, $109,100; cars, tools, etc., $61,125; live stock, $61,000.

The population of these collieries is estimated at 2,053; number of workmen 410. The amount of coal brought to the city from these mines for any series of years, could not be obtained. The statistics of the Pennsylvania Railroad, however, show that in 1864 there were 3,263,400 bushels brought to Pittsburg from the mines along its route. From statistics for the years 1853-54-55 and '56, in the possession of the editor of the *Circular*, the amount of coal mined was as follows: Number of tons brought to Pittsburg, 305,000; taken East, 350,000.

The Allegheny Valley collieries form the concluding division of the Pittsburg coal trade —three of which send their coal to this city. The statistics of two of those are given thus: Number of acres embraced, 1,460; hands employed, 450; value of lands, $600,000; of houses, $46,000; of live stock, $8,000; of cars, tools, etc., $66,425; of improvements other than houses, $100,000; population of collieries, 2,000. This coal is transported over the Allegheny Valley Railroad, and from the manifests of that road it appears the amount carried during the years 1862-63 and '64, was 180,413 tons.

The following is the recapitulation, which furnishes an exhibit of the whole coal trade of Pittsburg:

| | |
|---|---|
| Number of collieries | 103 |
| Hands employed | 6,424 |
| Number of cars | 21,258 |
| Value of coal lands | 7,519,700 |
| Value of houses | 1,267,000 |
| Value of improvements other than houses | 1,344,300 |
| Value of cars, tools, etc | 354,695 |
| Value of live stock | 208,175 |
| Population of the collieries | 30,960 |
| Coal mined in 1864, bushels | 48,462,966 |
| Of which was consumed in Pittsburg | 18,921,399 |
| Of which was exported by Ohio river | 29,541,567 |

In the recapitulation, in giving the number of collieries and hands employed, several small mines in the neighborhood of the city are not included. In the aggregate of bushels mined in 1864, the exports by the Pennsylvania Railroad are not given.—*Pitts. Trade Circular.*

---

The long course of experiments at Woolwich, which have been conducted by Mr. Richardson, show the perfect practicability of the use of petroleum as fuel for steam vessels. Some slight alterations are now about to be made in the boiler, and when these are completed it will be able to burn the Rangoon, Barbadoes, or Trinidad petroleum, together with the English coal and shale oils alternately, as well as every other kind of hydrocarbon, and to obtain any degree of speed that may be required without waste.

---

☞At Redwood Falls, Wis., about twenty miles above Fort Ridgley, an immense deposit of coal has been found to exist.

## BRIDGE AND TUNNEL AT PITTSBURG ON THE DIRECT ROUTE TO STEUBENVILLE, COLUMBUS AND INDIANAPOLIS.

Washington Street Bridge.—A short distance from the new Union Depot at Liberty street, is the Washington street bridge, which carries the street over the three tracks of the railroad, at a height of twenty-two feet. The span of the bridge, forty-eight feet, is supported by ten iron columns and iron "I" beams. The steep grade of this bridge required it to be paved, the surface being overlaid with a bed of cobble stones. The bridge abutments are substantial and neat. A skillful combination of beauty and durability has been attained in this structure. Messrs. James Marshall & Co., of this city, furnished the massive iron columns. At this point begins the heavy cutting, 536 feet long, and from 12 to 20 feet in width, which leads to Seventh street, the commencement proper of the tunnel. The work of effecting this cutting was attended with many difficulties on account of a bed of treacherous quicksand about nine feet thick, and a quagmire of almost interminable depth. The old State sewer also gave way during the progress of excavation, frequently flooding and delaying the work. We have now reached the

Seventh Street Bridge, and the mouth of the tunnel. This street is less precipitous than Washington street, and paving was not necessary. The flooring consists of two layers of heavy oak plank, made water tight by coal tar between the interstices. The supports are twelve-inch wrought iron beams resting on the abutments. Span twenty-four feet, height twenty-two feet.

The tunnel runs nearly due north and south—the tangent or straight part being north, six degrees east. There is, however, a considerable curve at either end. About 324 feet are on a curve of seven degrees at the northern, and 205 feet on a curve of four degrees at the southern terminus. Total length, 1,418 feet. Height from grade to center of arch, twenty-two feet. Average thickness of masonry rising to springing line at a height of eight feet, two inches from grade, three feet. In several places the thickness was increased on account of peculiarities of soil. From five to seven, usually the latter number, courses of "sheeting" or dressed stone rise above the masonry. Height of each course, fourteen inches. The crown of arch consists of from five to nine courses of brick. The strata through which the tunnel was driven were shelving, broken, dipped, and in places quite irregular, preserving, however, the same general characteristics, being in succession blue sandstone, underlying a bed of tough fire-clay, next, hard limestone covered by a bed of quicksand. Through this bed of sand the tunnel heading was driven. The work was of the most perplexing, difficult, and sometimes dangerous character. The soil over the preparatory roofing was often very shallow, the surface being only from forty to fifty feet above the bottom grade. Hence the great difficulty experienced in roofing under such a mass of loose earth and sand.

From Seventh street, a distance of 330 feet was excavated as an open cut, and then arched over and filled up. This carried it under Fountain and Tunnel streets (forty five feet above grade), Strawberry and Denny alleys. Then commenced the underground work, which reaches to the south line of Wylie street, a distance of 494 feet, passing under Webster (fifty feet above grade), and Wylie (forty-one feet above grade) streets. From the south side of Wylie street another open cut of 594 feet in length, and varying according to the inequality of the ground, from twenty-five to forty feet in depth, carried it to the south side of Pennsylvania Avenue, (twenty-two feet above grade). At this latter point the tunnel ends. Its southern approach extends from Pennsylvania avenue to Fourth street, nearly 300 feet. A strong retaining wall, twenty-five feet high at Pennsylvania avenue, and four feet at Fourth street, supports Try street along this line.

The Connellsville Railroad Bridge, or rather the bridge crossing that road, just before entering upon the great bridge over the Monongahela river, is of four spans, of forty-five feet each of wrought iron and boiler plate girders, supported by huge cast iron columns. Its minimum elevation is seventeen feet, and at the river where the ground was sloped down it is twenty-two feet. The girders are three feet deep, and well stayed with lateral bracing.

The Monongahela River Bridge.—The river is spanned by five trusses of wood, each 187 feet in length, and one iron span 260 feet in length for double track, over the channel. The wooden spans have a double series of braces, supported on "Piper's improved bearing blocks." The roadway passes over the wooden spans, and through the iron bridge, affording at the channel, a clear headway of about 60 feet from low water. This span is 23 feet in clear width, and 28 feet in height, and will sustain safely two tons per foot. The bridge was constructed from the same patterns used for the structure over the channel at Steubenville. The designs appear both novel and original. Each truss is double and combined to give greater lateral stability, so essential in great spans. The combination posts are trussed, avoiding the necessity of using heavy columns. The tension chains each consist of light, wide eye bars, with "upset" ends, linked together by connecting pins four and a half inches in diameter. In this system the entire strength of the material is economized without carrying any useless weight. This structure presents a light and graceful appearance, while its immense strength may be inferred from the fact that 100 tons of bolts, more than 90 tons of chord links, and 300 tons of castings, all of approved quality, have been judiciously employed in its construction. This span is constructed according to the patents of "Linville and Piper."—*Pittsburg Chronicle, Sept.* 21.

These works are all on the extension of the Pennsylvania Railroad to the south bank of the Monongahela river, where it connects with the direct route thence to Steubenville.

There is now a direct route, operated by harmonious interests, from Pittsburg to Indianapolis, via Steubenville, Newark, Columbus.

---

## FUNDED DEBT AND BONDS.

The intelligence of the favorable state of the Government finances, and of the fact that the Secretary of the Treasury is about to issue five-twenty bonds to redeem compound interest notes and certificates of indebtedness, has had a favorable effect on the market, because a large amount of those certificates is held by our bankers, and the 5-20s being preferable to them, the change is the more satisfactory. But this had a depressing effect upon the market for 5-20s, it being supposed that the new issue would effect the price of them; but it is

not reasonable to suppose that this will be the case, in the face of the fact that there has been a marked decrease in the public debt during the last month.

The following is a synopsis of the footings of the public debt on the last day of last month:

Debt bearing interest in coin, $1,116,658,-191 80; interest, $65,001,570 50. Debt bearing interest in lawful money, $1,260,009,120 44: interest, $72,527,645 75. Debt on which interest has ceased, $1 389,320 09. Debt bearing no interest, $866,891,093 94. Total amount outstanding, $2,744,947,726 17. Total interest, $137,529,216 25. Legal tender notes in circulation, 1 and 2 years 5 per cent. notes, $32,954,230; U. S. notes, old issues, $392,070; U. S notes, new issue, $427,768,499; compound interest notes, account of March 3, 1863, $15,000,000; compound interest notes, account of June 30, 1864, 207,012,141; total, $678,126,-940. As compared with the statement for August, there is a reduction of the public debt of nearly $12,742,000, and of interest over $500,000; and also a reduction of $6,012,000 of legal tender notes in circulation. There is in the Treasury in coin $32,740,788 43; in currency, $56,236,441 13; total, $88,977,229 56 —showing a decrease of nearly $12,700,000 of coin as compared with the August statement, and an increase of $13,454,157 of currency. The amount of fractional currency is $26 487,-754, an increase of $143.000. There has been an increase of June 30, 1864 5 20 bonds of $8,211,000, and of the July 11, 1862, six per cent. temporary loan of nearly $3,000,000, and of the Mareb 1, 1864, certificates of indebtedness, a reduction of over $22,000,000.

This is a most favorable statement and shows a reduction in the public debt of over twelve and a half million dollars, during the month.

---

Opening of the Railroad Bridge at Steubenville.—We noticed in Tuesday's *Chronicle* the fact that the new bridge at Steubenville, over the Ohio river, would be open for travel on Wednesday. On the morning mentioned, a train, consisting of a locomotive, tender, and nine cars, heavily freighted with iron, passed over. The engine was run by engineer Jacob Gates, of Newark, Ohio. The Steubenville *Herald* says: "The bridge, which is about half a mile in length, and spans the river ninety feet above low-water mark, did not vibrate in the least by the motion of the passing train. It appeared as firm as a rock. The completion of this bridge, together with the 'Short Cut' Railroad between Pittsburgh and Steubenville, shortens the distance between the two cities, by railroad, about forty miles—one-half. Instead of going to Pittsburg by way of the Cleveland Extension, following the bend of the Ohio, the traveler can pass directly across the country, saving from one hour and a half to two hours, and one-half the distance. This road, beside, perfects one of the great thoroughfares from Cincinnati to New York *via* Steubenville, which claims to be shorter than any other road, giving the Steubenville route an importance which no other road has attained. The whole distance from Cincinnati to New York, by the Little Miami, Steubenville, Pittsburg, and Allentown route, is seven hundred and forty-four miles, and the only change of cars in the route will be at Pittsburg. The entire road, with arrangements for passengers and freight, we understand, will be in complete running order by the first of October next, when it will be distinguished by a complete equipment of new and splendid cars."

## LETTER FROM CAPTAIN HALL.

Henry Grinnell, Esq, has received a letter which Mr. Hall wrote to Captain Chapel to be forwarded to Mr. Grinnell, from which we publish the following interesting extract:

Winter Quarters, in Igloo, Friday, Dec. 10, 1864. Noo-Wook West End Rowe's Welcome, 64 46 N., 1 87.20 W.

Dear Friend Chapel: In this letter I have some *deeply interesting intelligence* to communicate to you. Since falling in with the natives I have not been idle. Nothing in Perry's narrative of second voyage for the discovery of Northwest passage relating to the Esquimaux of Winter Island and Igloolik, but these natives are perfectly posted up. Indeed, I find through my *superior interpreter*, Too-too-li-too, that many deeply interesting incidents occurred at both named places that never found their place in Parry or Lyon's works. But the great work already done by me is gaining little by little of these natives through Too-koo-li-too and E-bier bing, relating to Sir John Franklin's expedition. This, you know, was the great object of my mission to the North. I can not stop to tell you now all I have gained of this people—no, not the one-hundredth part—most of it relating to Franklin's expedition.

I will give you very briefly what the people of England and America will be most interested to learn. When I come down I shall bring my dispatches and journal up to the time of writing you. These will be committed to your care for transmitting to the States The most important matter that I have acquired relates to the fact that there may yet be three survivors of Sir John Franklin's expedition—and one of these—Crozier, the one who succeeded Sir John Franklin on his death. The details are deeply interesting, but this must suffice till I come down. Crozier and three men who were with him, were found by a cousin of Ou-e-la (Albert), Shoo-she-ark-huni (John), and Ar-too-a (Frank), while moving on the ice from one igloo to another, this cousin having with him his family and engaged in sealing This occurred near Nettch il le (Bouthia Felix Peninsula). Crozier was nothing but skin and bones, and was nearly starved to death, while the three men with him were fat.

The cousin soon learned that the three fat men had been living on human flesh—on the flesh of their companions, who all deserted the two ships that were fast in mountains of ice, while Crozier was the only man that would not eat human flesh, and for this reason he was almost dead from starvation. This cousin, who has two names, but I can not stop to give them now, took Crozier and the three men at once in charge. He soon caught a seal, and gave Crozier quickly a little—a very little piece, which was raw—only one mouthful the first day. The cousin did not give the three fat men anything, for they could well get along till Crozier's life was safe. The next day the cousin gave Crozier a little larger piece of the same seal. By the judicious care of this cousin for Crozier, his life was saved. Indeed, Crozier's own judgment stuck to him in this terrible situation, for he agreed with the cousin that one little bit was all that he should have the first day.

When the cousin first saw Crozier's face, it looked so bad, his eyes all sunk in, the face so skeleton-like and haggard, that he (the cousin), did not dare to look upon Crozier's face for several days after; it made him (the cousin), feel so bad! This noble cousin, whom the whole civilized world will ever remember for humanity, took care of Crozier and his three men, save one, who died, through the whole winter.

One man however, died a short time after the cousin found them, not because he starved, but because he was sick. In the spring, Crozier and the remaining two men accompanied this cousin on the Bouthia Felix Peninsula to Neitshille, where there were many Innuits. Crozier and each of his men had guns and a plenty of ammunition, and many pretty things. They killed a great many ducks, nowyers, &c., with their guns. Here they lived with the Innuits at Neitchille, and Crozier became fat and of good health. Crozier told his cousin that he was once at Innoit le (Repulse bay), at Winter Island and Igloolik many years before, and that at the two last named places, he saw many Innuits, and got acquainted with them.

This cousin had heard of Parry, Lyon and Crozier of his Innuit friends at Repulse bay, some years previous, and therefore when Crozier gave his name, he recollected it. The cousin saw Crozier, one year before he found him and three men, where the two ships were in the ice. It was there that the cousin found out that Crozier had been to Igloolik.

Crozier and the two men lived with the Neitchille Innuits some time. The Innuits liked him (C) very much, and treated him always very kindly. At length Crozier, with his two men and one Innuit, who took along a ki-ak (!) an India-rubber boat, as E-bier-bing thinks it was, for all along the rihs there was something that could be filled with air, left Neitchille to try to go to the Kob-lu-nas country, taking a south course.

When Ou-e la (Albert) and his brothers, in 1854, saw this cousin that had been so good to Crozier and his men, at Pelly Bay (which is not far from Neitchille), the cousin had not heard whether Crozier and the two men, and Neitchille Innuit had ever come back or not. The Innuits never think they are dead—do not believe they are. Crozier offered to give his gun to the cousin for saving his life, but the cousin would not accept it. He was afraid it would kill him (the cousin), it made such a great noise, and killed everything with nothing. Then Crozier gave him (the cousin) a long, curious knife (sword, as E-bier-hing and Too-koo li too say it was), and gave him many pretty things besides. [The dogs are all in harness, and sledges loaded, and Innuits waiting for my letters I promise to be ready in thirty minutes.] Crozier told the cousin of a fight with a band of Indians—not Innuits, but Indians. This must have occurred near the entrance or Great Fish of Back's river. More of this when I see you. * * *

God bless you, C. F. Hall.

---

## AMERICAN DESULPHURIZING COAL AND ORE COMPANY.

We are in receipt of the prospectus of this Company. From it we learn that they have purchase the very valuable patent issued to B. F. Penniman, for the invention of an improved process in purifying coal and ore from sulphur and other impurities. The value of this invention, we should judge from the evidence presented, must be very great to the iron interest, and should receive the careful attention of all manufacturers and workers. By this invention impure coal may be freed from sulphur and rendered available for purposes such as forging, smelting, the manufacture of gas, and the like, for which it may otherwise

have been wholly unsuited. Ores of iron containing sulphur, and that therefore produce "red short iron," may be purified to the improvement of both the quantity and quality of the yield; and ores of gold may be more easily and perfectly amalgamated than by the present ordinary process, in which the action of the mercury is to a very great extent prejudiced by the presence of sulphur. An extended and thorough trial by Mr. Everett, manager of the Novelty Iron-Works of this city, resulted in an economy of fuel as compared with the coal in its unpurified state.

We append Mr. Everett's statement:

We have made the following experiment with bituminous coal, prepared under your direction, in our smiths' shop. For five consecutive days the amount of coal consumed was 24,017 lbs.; the succeeding five days, with the same kind of coal, taken from the same heap, but prepared as instructed by you, there were consumed 20,645 lbs. To avoid error, the prepared coal was weighed in its natural state, and the character of work done in the smiths shop was as uniform as possible for the ten days. Although the coal used was unusually free from sulphur, yet even with this superior quality, there was a direct economy in quantity, of 14 per cent.; but the most material advantage obtained is in the rapidity with which heats were obtained, the improvement in the character of work, and increased quantity performed by reason of the removal of the impurities.

---

Tennessee Railroads.—The Memphis and Charleston extends through West Tennessee, North Mississippi, and North Alabama to Chattanooga, crossing, at Grand Junction, the Mississippi Central, at Corinth, the Mobile and Ohio, and connecting at Decatur, Ala., with the Tennessee and Alabama Railroad. At Chattanooga it connects with the system of Georgia and South Carolina roads, and through East Tennessee, with those of Virginia and Maryland. It is being rapidly repaired and put in operation throughout the entire length.

The Mississippi and Tennessee extends from Memphis through the most fertile region of North Mississippi to Grenada, connecting there with Jackson, Miss., and New Orleans, and with Vicksburgh on the west, and Meridian, Mobile, Demopolis, and Selma on the east. This road also is being put into running order throughout its entire length.

---

☞ The Missouri Pacific Railroad, extending from St. Louis to Kansas City, which is situated near the junction of the Missouri River with the Kansas State line—a distance of 283 miles—was finished on the 19th inst. The company was incorporated with a capital of $10,000,000 on the 12th of February, 1849; but it was not regularly organized until the 31st of January, 1850, and the formal breaking of ground took place on the 4th of July, 1851. The total cost of the road, including the rolling stock, has been about $12,000,000. At Kansas City this road will connect with the Union Pacific Railroad, which is to run up the Kansas Valley and Republican Forks to the one one hundredth degree of west longitude, near Fort Kearney, the starting point of the main line to the Pacific, the whole distance being upward of 2,000 miles west from St. Louis. There are now 283 miles of rail laid, and 60 miles east from Sacramento in Placer County, California, making 343 miles of rail laid, or more than one sixth of the entire route.

Sacramento Valley Railroad Purchase.—We mentioned some days ago that George F. Bragg, of San Francisco, had, on behalf of himself and others, purchased a controlling interest in the Sacramento Valley Railroad Company, buying out the entire stock held by L. L. Robinson and Pioche & Bayerque. It was not at that time known whom Bragg represented in the purchase, but the developments of Tuesday and yesterday show that Sacramento capitalists were probably somewhere in the background and were the instigators of the movement At all events, it turns out that the principal stockholders of the Central Pacific Railroad Company have purchased of Bragg his entire interest in the Valley road, including the late purchase from Pioche & Bayerque and Robinson. Under the new arrangement an election was held in San Francisco on Tuesday, which resulted in the choice of Leland Stanford, E. B. Crocker, Charles Crocker, Mark Hopkins, E H. Miller, Jr., A. P. Stanford and R S. Fretz, as Directors of the Sacramento Valley Road. By the action of the Board, L. Stanford was elected President, E. B. Crocker, Vice-President; E. H. Miller, Jr., Secretary, and Mark Hopkins, Treasurer. The new purchasers took formal possession yesterday of the road and property of the company. As yet no changes have been made as to the superintendency, time of running trains, etc. The Sacramento Valley Railroad Company has occupied and used the Freeport road under a lease of ten years, on the payment of $14,000 per year. This lease, of course, is still held by the new company. The general belief is that the Freeport business will now be concentrated in this city. At all events it is safe to say that all antagonism which has heretofore existed is now at an end, and that the entire management of both roads is in the hands of Sacramento citizens The meetings of the Board of Directors of the Valley road will hereafter be held in Sacramento. This purchase does not carry with it any interest in the Sacramento Valley and Placerville road running from Folsom to Shingle Springs. That road is owned principally in El Dorado. Charles McLean, of San Francisco, is the President of the company That road is, however, at the present time, worked by the rolling stock of the Valley road, having none of its own.—*Sacramento Union.*

---

Long Lines of Railroad. — The gross amount of receipts for passengers and freight on the Michigan Central Railroad, during the month of August, 1865, was $413,501 21; the receipts for August, 1864, were $346,781 36. Increase, $66,719 85. Tabular statements on the books at the office shew that nearly one-half of the amount of the above receipts is derived from through traffic, which shows the importance of a long line of rail, communicating between prominent points, in sustaining railroad enterprises. With the through traffic on the Central, it is enabled not only to compete successfully with other many routes running east and west, so far as the amount of business and the profits are concerned, but also in respect to the stocking of the road, and keeping it in repair, in the promptness of its appointments, and the ample accommodations which are furnished for all branches of traffic. Without its through traffic, it could not do all that and pay handsome dividends to its stockholders beside. And just here let the friends of various railroad enterprises that are now entertained in respect to such undertakings in this State learn a little wisdom, which is embodied in the simple fact that no short railroad route, not running in connection with, and which is not a part of a general system of railroads, can prove a success.—*Detroit Advertiser.*

---

## ROLLING RESISTANCE ON RAILWAYS.

Nicholas Wood made some experiments, thirty-five years ago, to determine the resistance to rolling on cast iron rails, which were in short lengths. He used pairs of wheels 34 inches diameter, which he rolled down inclines. The results showed a varying resistance, the average of which he stated at .001 of the weight of the wheels and axles. But the variation of resistance, which was considerable, showed that the flange friction had some influence, as evidently it must have. And the amount of this flange friction seems not yet to be known precisely.

If some one who has a pair of driving-wheels without flanges would test their resistance to rolling, and publish it, he might confer a benefit on railways. A small cord wound round the axle, and a weighing spring, would enable a careful experimenter to see the power required to maintain a slow rate of speed.

But there is, intimately blended with rolling resistance, another kind of resistance of which little account has been made; it is that due to the flexure of the rails, the yielding of the sleepers and earth, and the general shaking of the earth around when a train passes. These resistances increase with the weight. But a pair of light wheels rolling down an incline without a load on them, would give a little indication of them; yet in practice it is found that the resistances combined are more than double the theoretical resistance deduced from the trials at a slow speed. The excess is ascribed to "collisions," that is, the jerks, contact of flanges with the rails, etc. But there is not sufficient clearness in the analysis. It is not stated in books, on any good authority, what is the resistance to an iron wheel, with cylindrical rim, rolling on an iron plane, without flexure, disturbance of the ground, or other cause of waste of power.

There may be more in this than is generally suspected. The early railway men held that the resistance to railway trains was 7½ to 8 lbs. per ton, at all speeds, exeepting the atmospherie resistance. But the dynamometer shows that the combined resistanee4 are sometimes 29 lbs. per ton, and 14 to 20 lbs. per ton at speeds under 30 miles per hour. What miscalculation could have made so great a difference? Probably they assumed, a truer ail or plane, a rigid foundation, and made no account of the flexure of the rails. But the foundations are not rigid; the degree of rigidity at first given, by laying rails on large stone bloeks, was given up because it operated like an anvil, so that the action of the wheels rapidly destroyed the rails, and the wheels at the same time.

The idcal of the system was, a perfectly solid foundation, such as might be where a rocky bed was available. Now we are of opinion that this was not wholly erroneous; that, if the defeets of the wheels and carriages were removed, even to the extent of eommon road carriages, a rigid foundation would be admissible, and would keep the level so true that the total wear and tear would be less than in any other railway yet made; and the saving of power would be considerable.

For street railways, especially underground, there is no objection to such a solid foundation, with wheels truly cylindrical, to be kept on the track by horizontal guide-wheels, so as to dispense with flanges. The flange, we be-

lieve, is the chief cause of the failure to realize what the early railway men expected. I is the chief cause of resistance; therefore the chief reason why heavy engines are necessary, and therefore the chief cause of the destruction and wear of the permanent way, as it is still called. Leave off the flange, and we may use wheels truly cylindrical, and run so smoothly, and preserve so wide a contact between wheels and rails, that the limits of elasticity will not be exceeded, and the rails may last as long as was expected.

For a city railway, working at high speed, the best foundation would be solid rock, unless we could have a solid bed of iron. Then let the rails he so laid upon it that they cannot bend. Then the question is, what will be the resistance to rolling.

If such a road would not suit the running gear in use, let the running gear he amended, so that we may have what was promised—less than half the resistance now encountered on the hest railways.

---

NORTHERN CENTRAL (MD.) RAILWAY.—The city of Baltimore has sold out all its interest in this road for $881,000. The Company was the purchaser.

---

☞The Baltimore and Ohio Railway Company commenced locating the branch from Washington to Point of Rocks on the 10th ult. Richard Randolph, Esq., has charge of the survey. The length of the road will he about forty miles.

---

☞A coal-mining company about to go into operation on the James river, Va., has applied to the Freedmen's Bureau for one thousand colored operatives at fair wages.

☞Nearly 9,000 operatives are now employed hy the Lowell (Mass.) mills.

☞It is reported that extensive discoveries of silver and copper ore have heen made on the Blue Ridge, in the vicinity of Culpepper Court-house, Va. The copper deposits are said to be exceedingly rich. Lead in small quantities has also heen discovered in the neighborhood of Orange Court-house.

☞At the gold mines near Halifax, N. S, 1,200 ounces of gold per month are taken out.

---

## MONETARY AND COMMERCIAL.

Since our last issue gold has fluctuated from 143 to 149, reaching the latter figure on Friday, subsequently receding to 146⅝ on Monday, 146 on Tuesday, and 145¼ on Wednesday. These changes are without obvious reason, and purely speculative.

Exchange has also heen very irregular, the quotations heing 1-10 dis. @ par huying, and par @ 50 prem. selling. In some quarters there was more willingness to sell at par than to buy at 1-10 dis.

| | Buying. | Selling. |
|---|---|---|
| New York | 1-10 dis @par | par@50 prem. |
| Philadelphia | 1-10 dis @par | par@50 prem. |
| Boston | 1-10 dis @par | par@50 prem. |
| Baltimore | 1-10 dis. | par. |
| Gold | 144 | 145@145¼ |
| Silver | 136@137 | 137@138 |

The import entries of the past week in New York, amount to $4,288,947, as against the total entries of $3,247,663 same week last year. The export clearances of domestic produce are $2,418,527 against $3,622,350 same week last year. The export of specie amounts to $316,092 against $287,758 same week last year.

The imports of New York since January 1, compare as follows:

| | |
|---|---|
| 1864 | $193,314,245 |
| 1865 | 151,265,588 |
| Decrease | $42,048,657 |

The exports same time, exclusive of specie, compare thus:

| | |
|---|---|
| 1864 | $174,190,882 |
| 1865 | 113,792,067 |
| Decrease | $60,398,815 |

The exports of specie were as follows:

| | |
|---|---|
| 1864 | $35,376,572 |
| 1865 | 23,004,686 |
| Decrease | $12,371,886 |

The receipts of gold from California were as follows:

| | |
|---|---|
| 1864 | $8,968,551 |
| 1865 | 13,728,147 |
| Increase | $4,759,596 |

The customs received in gold at New York from January 1st to October 7th, were $76,903,526, and the gold interest paid out, $28,565,643

The subscribed capital of the National Bankers' Express is $10,000,000.

Tallow was dull in New York Saturday at 15½@15⅝c.

The specie in hanks and Sub-Treasury at New York on the 1st of October compares as follows:

| | |
|---|---|
| 1865 | $46,595,974 |
| 1864 | 31,944,614 |
| 1863 | 39,146,457 |
| 1862 | 41,382,000 |
| 1861 | 53,400,000 |
| 1860 | 25,400,000 |
| 1859 | 23,855,000 |

There was bonded during the month of September $5,548,616.

The New York stock market opened strong on the 10th, and prices were higher, hut in the afternoon quotations were off somewhat. Prices compare as follows:

| | Mon. A. M. | Mon. P M. | Tu. A. M | Tu P.M. |
|---|---|---|---|---|
| U. S. 6 per ct. B'ds, 1881 | 107⅝ | 107¾ | 107⅝ | 107¾ |
| " 5-20 " old | 103⅝ | 103⅝ | 103¾ | 104¼ |
| " 5-20 " new | 101⅞ | 101⅞ | 162¼ | — |
| " 10-40 " | 93⅜ | 93⅜ | 93⅜ | 93½ |
| " One-year Certificates | 98⅝ | 98⅝ | 98⅝ | 98⅝ |
| 1-30s | 98¾ | 98¾ | 98⅝ | 98⅝ |
| New York Central | 9 ⅞ | 102⅞ | 103⅝ | 10⁷₈ |
| Erie | 91 | 92 | 92¼ | 91⅝ |
| Hudson River | 107⅛ | 109¾ | 109⅞ | 109⅛ |
| Reading | 117 | 118 | 118⅜ | 117½ |
| Michigan Central | 115½ | 115½ | 114½ | — |
| Michigan Southern | 74⅛ | 78 | 75⅝ | 74⅜ |
| Illinois Central | 134 | 135 | 136 | 136 |
| Cleveland & Pittsburg | 84 | 84 | 83⅜ | 83 |
| Chicago & Northwestern | 30⅝ | 31½ | 31½ | 31⅝ |
| " " pref | 67 | 67⅜ | 66⅜ | 66½ |
| Cleveland & Toledo | 110½ | 110½ | 110⅝ | 110⅝ |
| Rock Island | 110⅝ | 111½ | 112½ | 111¼ |
| Pitts., Ft. Wayne & Chicago | 101⅞ | 102 | 103 | 103⅜ |
| Ohio & Mississippi Certificate | 30 | 30⅛ | 30⅞ | 30⅜ |


# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.



TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI | 9:00 A. M. | 10:40 P. M. |
| HAMILTON | 9:57 " | 11:43 " |
| DAYTON | 11:30 " | 12:55 A. M. |
| SPRINGFIELD | 12:35 " | 1:45 " |
| URBANA | 1:40 P. M. | 2:15 " |
| GALLION | 5:25 " | 6:10 " |
| MANSFIELD | 6:50 " | 7:15 " |
| AKRON | 9:30 " | 10:00 " |
| RAVENNA | 10:05 " | 0:40 " |
| LEAVITTSBURG | 11:00 " | 11:40 " |
| GREENVILLE | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE | 1:20 " | 2:30 " |
| CORRY | 2:45 " | 3:55 " |
| Arrives SALAMANCA | 4:58 " | 2:55 " |
| NEW YORK | 10:30 P. M. | 1:00 " |
| BOSTON | 2:30 " | 8:30 A. M. |
| PITTSBURGH | 2:20 A. M. | 3:20 P. M |
| HARRISBURG | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA | 5:35 " | 6:55 " |
| BALTIMORE | 5:45 " | 7:00 " |
| WASHINGTON CITY | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts, Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast cornor of Broadway and Front streets, and at No. 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLARE

J. P. SARVER, CHAS. COOK, } Passenger Ags

# COUPON AND LOCAL TICKETS!

CONSECUTIVELY NUMBERED.

---

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

CONSECUTIVELY NUMBERED

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

---

*Ticket Agents and other Railroad Men are invited to call and see our work.*

**WRIGHTSON & CO.,**

*No. 167 Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD


## RAILROAD OFFICES AND AGENTS.

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St.

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord, General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A. B. Waters, Freight and Ticket Agent, Cor. Third and Walnut.

**Ohio & Mississippi**

W. E. Bruce, Freight and Ticket Agent, Gagette Building, 82 West Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J. R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg, Contracting Agent, Vine St. under Burnett House
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent, ", "

**Central Ohio & Pittsburg, Columbus and Cincinnati.**

James E. Shields, General Agent, No. 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A. J. Day, S. W. Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J. W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burnet House.

**New York Central.**

G. B Gibson, S. W. Passenger Agent. W. H. Page Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Pittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent, No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.

Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

## Indianapolis and Cincinnati

## RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St Joe Express.. | 1:00 P. M. | 9:?7 P. M. |
| St. Louis and Chicago Express... | 10: 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city. ROBT. MEEK, Superintendent.

T. B. LORD, Genl Ticket Agt.

---

## BENJ. H. LATROBE AND C. H. LATROBE,

## CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also, the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.

**Through to Pittsburg without Change.**

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

---

Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7: 0 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

---

## *STEAMSHIP COMPANY.*



MAIL STEAMERS to FRANCE DIRECT. The GENERAL TRANSATLANTIC COMPANY'S new line of first-class side wheel STEAMSHIPS between NEW-YORK and HAVRE.

The first five splendid Vessels, intended to be put upon this favorite route for the Continent, are the following:

| | |
|---|---|
| WASHINGTON..... | 3,004 tuns, 900 horse-power. |
| LAFAYETTE ..... | 3,004 tuns, 900 horse-power. |
| EUROPE..... | 3,254 tuns, 900 horse power. |
| FRANCE..... | (afloat). 900 horse power. |
| NAPOLEON III..... | (afloat), 11,00 horse power. |

DEPARTURES FROM NEW-YORK TO HAVRE, stopping at BREST to land Mails and Passengers, thereby shortening the sea-voyage about one day.

First Cabin (including table wine)..... $135.
Second Cabin (including table wine..... $70 or $80.

Payable in gold, or its equivalent in United States currency. MEDICAL ATTENDANCE FREE OF CHARGE.

For freight or passage, apply to

GEORGE MACKENZIE, Agent,
No. 7 Broadway, New-York.

At Paris, No. 12 Boulevard des Capucines (Grand Hotel); at Havre, WILLIAM ISELIN & Co. 640*

---

NATIONAL STEAM NAVIGATION COMPANY. (LIMITED.)

NEW-YORK TO LIVERPOOL, CALLING AT QUEENSTOWN TO LAND PASSENGERS.

| *Ship.* | Tuns. | *Commander.* |
|---|---|---|
| QUEEN (now building)..... | 3,412..... | ——— |
| ENGLAND (now building).. | 3,430..... | ——— |
| SCOTLAND (now building) | 3,430..... | ——— |
| ERIN..... | 3,310..... | Grace. |
| HELVETIA ..... | 3,315..... | Prowse. |
| PENNSYLVANIA ..... | 2,872 ..... | Grogan. |
| VIRGINIA..... | 2,872..... | Lewis. |
| LOUISIANA... ..... | 2,166..... | Axpiett. |

Leaving Pier No. 45, East River, EVERY ALTERNATE SATURDAY.

The Cabin accommodations on board these steamers are unsurpassed, and the rates lower than by any other line.

CABIN PASSAGE TO LIVERPOOL.....$100.
STEERAGE PASSAGE TO LIVERPOOL....$35.
Payable in currency.

The owners of these vessels will not be accountable for specie or valuables, unless bills of lading, having their value expressed therein, are signed therefor.

For freight or cabin passage apply to

WILLIAMS & GUION, No. 71 Wall street.

For steerage passage apply to

640* WILLIAMS & GUION, No. 29 Broadway.

---

STEAM WEEKLY TO LIVERPOOL, touching at Queenstown, (Cork Harbor). — The well known steamers of the Liverpool, New-York and Philadelphia Steamship Company (Inman Line), carrying the U. S. Mails, are intended to sail SATURDAY, at noon, from Pier No. 44 North River.

RATES OF PASSAGES,
Payable in gold or its equivalent in currency.

| | | | |
|---|---|---|---|
| FIRST CABIN..... | $80 00 | STEERAGE..... | $30 00 |
| First Cabin to London.. | 95 00 | Steerage to London. | 34 00 |
| First Cabin to Paris.... | 105 00 | Steerage to Paris .. | 40 00 |
| First Cabin to Hamburg | 100 0- | Steerage to Homburg | 37 00 |

Passengers also forwarded to Havre, Bremen, Rotterdam, Antwerp, &c., at equally low rates.

Fares from Liverpool or Queenst wn, First Cabin, $75, $85, $105. Steerage, $30. Those who wish to send for their friends can buy tickets here at these rates.

For further information apply at the Company's Offices.

JOHN G. DALE, Agent,
640* No. 15 Broadway, New-York.

---

FOR SOUTHAMPTON AND HAVRE. The NEW-YORK MAIL STEAMSHIP COMPANY'S new and splendid side-wheel steamship

GUIDING STAR ..... 2,595 65-95 tuns,
WILLIAM B. BELL ..... Commander.

Will sail for HAVRE, calling at SOUTHAMPTON to land passengers and mails, on THURSDAY, June 15, at 12 o'clock, m., from the Company's pier, No. 46 North River, (third pier above foot of Canal street.)

First Cabin Passage..... $150
Second Cabin Passage..... 60
Payable in United States Currency.

An experienced surgeon on board; medical attendance free of charge.

The Guiding Star is one of the very best as well as one of the most elegant steamships ever built in this country. She has state rooms for 250 first-cabin passengers, and for comfort or elegance her saloons and state rooms are not excelled by those of any other steamer in the world.

Returning, the Guiding Star will leave Havre on the 13th of July.

Agents at Havre, Messrs. Draper & Hagenow; at Paris, Messrs. John Munroe & Co.

For freight or passage apply to
640* JAMES A. RAYNOR, No. 10 Barclay street.

---

## CENTRAL RAILROAD

—OF—

## NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

---

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

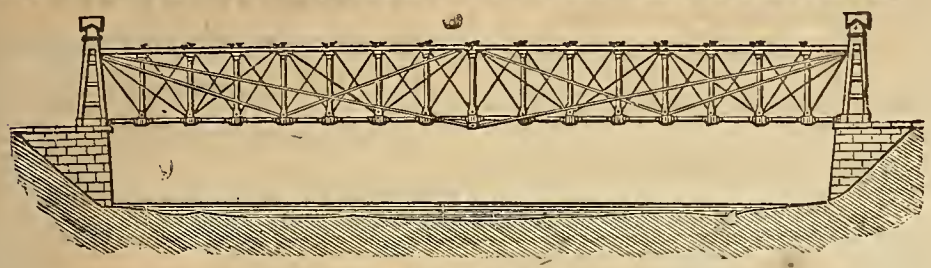
JAMES H. HOYT, Superintendent.

---

NEW-YORK AND HARLEM RAILROAD Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mr. 5, '63. 1y. Letter Box, 1362. C. J. SCHULTZ, Pittsburgh, Pa.

---

HOLENSHADE, MORRIS & CO.

MANUFACTURERS O

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets ..., Sch Screws, and Thresher Teeth, made on short notice. Ad on the most favorable terms. Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, - MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

*Philadelphia, Pa.*

Would call the attention of Railroad Managers, and those nterested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; nd in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular atten tion paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Loc m tive En-. 419 y I

---

KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA.

---

JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

## FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

---

BUSH & LOBDELL,

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES

Orders executed promptly to any extent for their

CELEBRATED WHEELS

Either Single or Double Plate,

With or Without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

Manufacturers, Importers & Dealers

—IN—

RAILROAD, CAR,

—AND—

MACHINE SHOP

SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

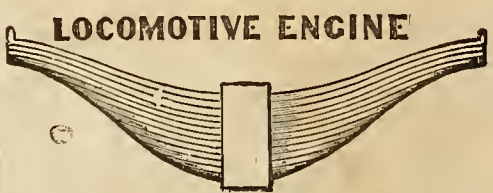
RAILWAY SPRINGS.

FREIGHT






LOCOMOTIVE ENGINE



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

ELLIPTIC AND SEMI-ELLIPTIC

SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

All Springs tested to double their usual load.

PHILP S JUSTICE,

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

No. 47 West Front St., CINCINNATI

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

W. M. F. HEWSON,

STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stock, Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by wrunning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractione of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE. *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M. leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Buses call for passengers.

## Change of Time.

SUNDAY, JUNE 19, 1865.

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Eoansville, St. Louis, Cairo, St. Joseph, Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street C. E FOLLETT, General Ticket Agent.

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:20 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtaine at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD. President,
W. H. L. NOBLE,
General Ticket Age t

C. R. COTTON, C ncinnati Agent.

## MOSELEY'S

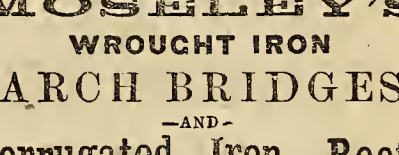
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

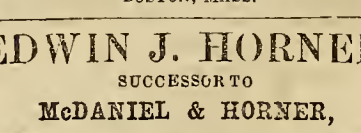
Snt. 2 MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron conducted at our own Works June9

**THE SCHENECTADY**

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—½ to 24 inches in diameter, and branches for same, &c.,

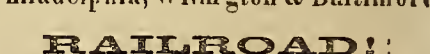
**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, THOS. T. TASKER, JR., HY. G. MORRIS. CHAS. WHEELER S. P. M. TASKER

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**



## FOUR PASSENGER TRAINS DAILY

**RAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points E Wes

WM. EARNS Supt

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON. - { Editors

CINCINNATI:
THURSDAY, OCTOBER 19, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE-No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 25 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

| | *Depart.* | *Arrive.* |
|---|---|---|
| **LITTLE MIAMI.** | | |
| Morning Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:30 P. M. | 11:0 A. M. |
| Night Express | 10:00 P M. | 9:30 A. M |
| Lightning Express | 7:30 P. M. | 4:35 P M. |
| Morrow Accommodation | 5:20 P M. | 8:00 A. M |
| **ATLANTIC AND GREAT WESTERN RAILWAY.** | | |
| Express Mail | 9:30 A. M. | 5:30 A M. |
| Night Express | 10:50 P. M. | 7:30 P M |
| **MARIETTA AND CINCINNATI,** | | |
| Mail | 7:40 A M. | 6:15 P M. |
| Hillsboro Accommodation | 3:00 P. M. | 11:00 A. M. |
| Night Express | 7:15 P M | 5:30 A. M. |
| **CINCINNATI, HAMILTON AND DAYTON.** | | |
| Toledo and Detroit | 7:00 A. M. | 9:25 P. M |
| Dayton and Sandusky | 7:00 A M. | 5:50 P M. |
| Richmond and Chicago | 7:00 A M. | 9:25 P M. |
| Dayton Accommodation | 2:10 P. M | 9:25 P M. |
| Indianapolis & Cambridge City | 6:00 A M. | 10:05 P. M. |
| " " | 4:00 P. M. | 12:15 P. M. |
| Toledo. Detroit & Huntsville | 5:00 P. M. | 12:50 P. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A M |
| Richmond & Chicago | 6:00 P. M. | 12:25 P. M |
| Hamilton Accommodation | | 7:55 A. M. |
| **CINCINNATI AND INDIANAPOLIS JUNCTION R. R.** | | |
| Connersville, Cambridge City and Indianapolis Mail | 6:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 4:00 P. M. | 12:25 P. M. |
| **INDIANAPOLIS AND CINCINNATI.** | | |
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A M. |
| Springfield & St Jo. Express | 2:00 P. M. | 4:45 P. M. |
| St Louis and Chicago Express | 5:15 P. M. | 1:30 A. M. |
| Lawrenceburg and Harrison Accommodation | 4:30 P M. | 8:30 A. M. |
| Harrison Accommodation | 9:25 A. M. | 2:35 P. M. |
| **OHIO AND MISSISSIPPI.** | | |
| St. Louis. Cairo and Louisville | 7:20 A. M. | 8:00 A. M. |
| Louisville Special Train | 3:45 P. M. | 1:50 P. M. |
| Louisville, St. Louis and Cairo Express | 7:50 P. M. | 11:00 A. M. |
| **CINCINNATI AND ZANESVILLE.** | | |
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4:00 P. M. | 7:45 A. M. |
| **COVINGTON AND LEXINGTON.** | | |
| Morning Express | 6:30 A. M. | 10:12 A M. |
| Evening Express | 2:35 P. M. | 6:08 P. M. |

## MINING INTEREST.

This is the greatest single interest of our country, with the exception of Agriculture. True the footings of Commerce may show a much larger row of figures, and such is also true as to Manufactures; but it must be remembered that Commerce is indebted wholly to Agriculture, Mining and Manufactures for the elements on which it is based, and Manufactures is equally indebted to Mining, Agriculture and the products of the forest. In an extended country like our own, to properly foster Agriculture has ever been conceded as among the most important duties of the Government, and while it may be the paramount interest of compact communities to devote themselves to Commerce and Manufactures, yet unless they are so situated that they can obtain an abundant and cheap supply of the products of Mines and Agriculture, they will soon be forced to close their workshops and warehouses, and their steamships and sailing vessels will have to seek other ports for their freights, or rot at the quays.

To Agriculture the Government has ever been liberal, by opening wide to all her domain at such a price that none are so poor that they cannot procure a home to which they can have as good a title as the Government can give. The veriest pauper that may visit our shore, if he has energy enough to put the bread into his mouth, can buy and pay for a farm This liberal and wise policy has made us a great and powerful people, until we are now able to feed nearly half the world from the surplus of our stores. Unfortunately, however, we have adopted the policy of the dark ages in relation to our Mineral lands, and they are still held in reserve by the Government. If, at the risk of his health and life, an enterprising citizen is desirous of opening up a new field of enterprise on mineral lands owned by the Government, it is impossible for him to obtain such a title as will transmit his property by will or deed to his assigns or heirs. This will be admitted by all as wrong in principle, contrary to the genius of free institutions, and a stigma upon the intelligence of the age in which we live.

There is another consideration that should prompt our Government to give as perfect a title to Mineral as it does to Agricultural lands, that is, its own necessities. It may be argued for a moment that the miner cares not whether he owns the right of soil or not, as he is a migratory, transient creature, and it makes no difference to him in whom the title rests, so that he can but get the treasure, and that, therefore, he would not be willing to pay his money for what he now obtains without price. Here the Government would not realize from the sale of Mineral lands the cost of the survey. This may at first appear correct; it at least bears a plausible resemblance to truth so far as regards the placer mines. The case, however, is so vastly different where permanent works have to be erected, at enormous expense, that no argument is required to show the necessity of security and perfection of title, and it is more especially to this portion of the mining interest to which we allude, and which, is now, and is in the future destined to be, such an important element in our welfare. This is an interest that needs the fostering care of Government, and we do not hesitate to say that it will be found if Congress should pass a wise and liberal law that a large revenue will be obtained from this source, which will materially aid in meeting the urgent needs of our dilapidated exchequer. Mr. Chase appreciated this, and gave his influence towards the close of his administration in favor of this measure. Mr. Fessenden also gave it, in a short paragraph, his most decided approval in his last annual report, and we hope to see Mr. McCullough in his forthcoming report, give Congress such statistical information and practical suggestions as will enable it to act promptly and intelligently for the best interests of the country and the most rapid, profitable and permanent development of its resources.

We are glad to see by the following telegram to the daily papers, that an interest is being awaked on this subject

NEW YORK, October 17—A meeting of gentlemen interested in the mining interests of the Western and Pacific States, was held today at No. 156 Broadway, for the purpose of forming a permanent association. The object of the organization is to develop the mining resources of the country. G. E. Curry was chosen Chairman, and J. L. Douglass, Secretary.

The following named persons were appointed to obtain signatures for a general meeting: Nevada, H G Worthington; Idaho, General M M. McCarver; California, G. F Benton; Montana, J H Sage: New York, Frank Fuller, Walter E. Lawton and Livingston Satterlee; Arizona, J. Silversmith; Oregon, Ex-Governor George L. Curry; Colorado, Governor Gilpin.

## AMERICA AND THE OLD CONTINENT.

As the United States is the preeminent nation of America, by a figure of speech frequently used, they are put for the entire American continent. It is in this sense we use the word in the above title. At the same time we mean to make many remarks, in which, so far as natural productions and the general geography of America and of the Old Continent are concerned, they relate to the whole of each continent.

We are justified in calling Europe, Asia and Africa *one* continent, because they are all connected by land with each other. America is separated by land from each one of the three great divisions of the Old World. Asia most nearly approaches but still there are many miles of water between.

The moral and intellectual character of a nation is the true measure of its title to our

c mmendation. No other standard will endure investigation. And while I would assert for this nation an equality with any other race existing, I am sensible of its defects. As yet, every nation that history records, is far from moral perfection. Every nation, therefore, has cause for humility and modesty in its pretensions. Nor will its real standing in the estimation of the world be diminished by this modesty of bearing. It requires something else than the shouts of our own self-applause to make the notes of the trumpet of fame.

Although it be true that we in the United States of America are far from fulfilling in practice all the duties that we ought, no modern nation exhibits more deep religious conviction and feeling; nor is the spirit of true religion in any nation more extensively diffused than in this. When King Lords and Commons tried to subjugate us, *for our good*, and when as they could not succeed, they lamented the fate of us poor orphans, who had gone away from those who had the only true religion exclusively to dispense, and could give it to us so easily by Apostolical succession, we had, notwithstanding, a true regard for the glorious gospel of Jesus Christ, and temples arose to Jehovah, God of Gods, and holy men expounded to our forefathers, and our mothers, who have descended to their graves with blessings on their memory, the doctrines of Him who is the way, the truth and the life. Nor have we ceased to hearken, in a good measure, to those excellent doctrines and precepts to this day.

Like the poor sons of the shepherd Jacob in Egypt, amidst a profusion of temporal blessings in a large part of their sojourn in that country, we have been interrupted and tried by heavy afflictions—Europe formed, when we had grown to be of much consequence, a very unfavorable opinion of our character, both mental and moral; not, indeed, *all* Europe, but the governing classes, almost universally.

The Abbe Raynal was but a representative of the literary and oligarchical powers of the European world, when he reproached universal America as an inferior continent, producing inferior intellect and inferior morals. He said of all America, that its inhabitants wanted capacity for *excellence* in any single art or science. "The Americans," says the Abbe, "have, in general, a readiness for acquiring a knowledge of every art or science, but none of them show a decisive talent for one in particular." This, in connection with the general strain of the Abbe's remarks on the subject, is equivalent to saying that the Americans are capable of superficial acquisitions in every art and science, but not of profound investigation and great attainments in *any one art or science*.

This idea was a strange prejudice of that age, fostered by the pride and vanity of the great majority of European kings, statesmen and philosophers. Yet even in that age there were abundant facts to refute this opinion. In answer, we may say, that in the age itself of the learned Abbe, Franklin showed a "decisive talent" for physical philosophy, and discovered the identity of lightning and electricity; a discovery which, in conjunction with that subsequently made of the magnetic currents, led the way and was essential to the invention of the magnetic telegraph; the latter another proof of American genius, another evidence of "a decisive talent" for a particular art. In politics this same Franklin also showed a "decisive talent." He foiled the university-bred and court-bred diplomacy of Europe. In the art of war, so long practiced in Europe, amid such numerous scenes of terrific slaughter, Washington and Greene, in that same age, displayed a superiority to all the boasted tactics and strategy of the Old World. And the Anglo-Americans themselves showed such a "*decisive talent*" in this difficult art, that they captured two armies of the richest and most powerful nation of Europe—then but recently fresh from a war in which, in the language of M DeVoltaire, England had triumphed in all the four quarters of the Globe.

And in our own age, what philosopher pursuing the science cultivated by Franklin, and its kindred science, magnetism, has applied them to the most useful purposes and invented a language by which men may talk to each other at thousands of miles distance? The American philosopher and republican Morse, the son of that Morse who was long known in our schools as the first author of an *American* national geography, and as an individual of eminent moral worth. These might alone serve largely to redeem America from the charge of failing to contribute her share to science and the useful arts. Our readers would not thank us for being so tedious as to enumerate the great names in science and art which America has furnished. We will, however, enumerate some of them. Whitney, of Connecticut, as a great and useful inventor, seems to come next after the great discoverer, Franklin, in our history. Whitney's invention, the cotton gin, has contributed immensely to swell the wealth of that haughty continent, which has directed against us so many shafts. We may mention Fulton, the Pennsylvanian, the inventor of steamboats, to offset the just claims which England has for the invention of the steam engine. The Marquis of Worcester and Newcomen, were one the inventor and the other the first improver of that most powerful of all the modern inventions for the advance of the arts and sciences, and for facilitating locomotion. But it was Watt's improvement of this engine which fitted it for the various applications and vast effectiveness which has characterized it ever since his day. Some improvements by others have been subsequently added. That old and luxurious Europe, at wide intervals from each other invented the Greek fire, gunpowder and fire-arms, including the musket, the rifle and rifled cannon. She is entitled to the credit of the very valuable art of printing, from which dates a new epoch in the arts and sciences. They have progressed since it was made as they never had before in an equal period of time. But the revolvers of Samuel Colt, a native of Connecticut, and the iron clad vessels of war, particularly such as the Mouadnock and the Agamenticus, are the invention of the United States of North America.

Of inventions adapted to peaceful pursuits, those States have furnished many. Several ploughs, the devices of the mechanical genius of her citizens, have contributed to aid agriculture. Whilst there are more than one good kind of reaper, that of McCormick carried off the palm at the great British exhibition of 1851, and deservedly occupies a very high place. The circular saw, an American invention, is very useful in wood work. In stoves, we have a great variety, some of which seem to unite every perfection.

Thus we see that the descendants of the natives of Europe in America, have not degenerated. There is nothing in the air or climate of the New World; in its soil, productions or animals, in the character of its rivers, plains or mountains, that supplies an argument for its inferiority, but rather the contrary. In the grandeur of its mountains, in the multitude and magnitude of its rivers, in the number and excellence of its harbors, it surpasses Europe and Africa. In its navigable rivers, and the number and commercial adaptations of its harbors, in its great lakes, the largest body of fresh water in the world, it exceeds even Africa; while its climate and soil will naturalize almost all the valuable products of the Old Continent, it furnished, when discovered, to the astonished inhabitants of Europe, new products—the Irish potato and Indian corn for instance—both highly valuable, but the latter a gift of marvellous value. Cotton was known to the ancients, it is the *Gossypicun* of the Romans. But its uses were very limited until America furnished it of a quality excelling all that had been previously known, and which is of unrivalled excellence. Sugar and coffee are two of its great staples, of which the Old World can furnish a moderate quantity of equal, some say of superior excellence, but in their amount, America, young as she is in the annals of civilization, largely outstrips the Old Continent. Its mineralogy and its mineral formations, cannot be excelled by the justly famous mines and salubrious mineral springs of the Eastern Continent. Its mines of gold, silver and coal confessedly transcend anything now known on earth. The Old World was, no doubt, richly stored with them in the primitive ages of mankind, but time has diminished their abundance, and though still possessed of large supplies, she is much inferior to America. In oleaginous riches she must also yield to America. With much

to boast in this kind of wealth, she flows but rills of oil, in comparison of the rivers of it which in America pour out from subterranean reservoirs.

Amidst such a combination of advantages for America, we may well exclaim of its people, a fortunate, *sua si bona norint* A fortunate people if you do but know your own great blessings. W. A.

## A FINANCIAL WANT.

The wild excitement of the last two years respecting mining and petroleum investments. has resulted in the formation of several hundreds of companies, with an aggregate nominal capital of over $800,000,000. A very large proportion of these companies —perhaps not less than two-thirds,—are now doing comparatively nothing toward the development of their properties, and do not possess the means for prosecuting operations. They were organized upon an unsound basis. little actual capital having been paid into their treasury beyond what was required for paying for their property, and the shareholders being generally exempted from liability to any further assessments for capital. Immerse tracts of lands containing gold, silver, copper, iron, coal and coal oil, are thus held by these companies absolutely unproductive, while they really contain mineral deposits capable of yielding a handsome profit upon the working of them

If unworked, all the money invested in their purchase is as completely lost to the community as though it had been sunk in so many acres of the Desert of Sahara If worked, the lands will, as a rule, prove as productive as the best mining lands in the world. There exists a great obstacle to the companies providing their working resources from among their own members, in the fact that the shareholders have become so disgusted with the depreciation of their stocks that they do not care to make any further investments in connection with them. It may be assumed as certain, indeed, that only the shareholders of the best managed companies, owning properties already productive, will contribute any further working capital.

What then can be done to render these new properties productive and to save the capital invested in them from being lost? Banks will make no advances to them. for bank managers know nothing about the properties upon which they would have to take security, and they can employ all their means in supplying the wants of commercial borrowers. Private capitalists are very much in the same position as the banks, and have been so prejudiced against the new companies, through the inflation connected with their organization and the subsequent depreciation of their stocks, that they would not entertain any proposals for assistance. The only way to meet the case appears to he in the organization of a wealthy company composed of parties interested in the development of the mining and petroleum resources of the country, and including in its management persons competent, from experience, to judge upon the merits of such investments, the chief business of the institution being to lend capital to worthy companies.

We need, indeed, a financial institution based upon the Credit Mobilier principle; with not less than $5,000,000 full paid up capital; and including in its management only men of high character and recognized business ability. Such an institution would be immediately overwhelmed with applications from embarrassed corporation, and its difficulty would not be in an inability to employ its capital, but in selecting the most promising out of a total of applications which would probably employ three times the amount of its capital. Its advances should be made upon a mortgage of the lands of the company, or some other equally good security, and its compensation first a six or seven per cent. interest upon its loans, and in addition a portion of the profits of the company borrowing. It would inure to the advantage of the institution and of the companies borrowing, were the loans made upon such conditions as would give the lenders power to inspect the management of companies to whom they had made advances; for too many of the new companies are in the hands of cliques who know nothing of mining and who manage affairs without either honesty or energy. Such supervision would, in many cases, remove the chief obstacle to the prosperity of valuable mines.

By a judicious employment of its capital, such an institution might realize very handsome profits to its stockholders, and largely promote the prosperity of our mining interests There would, indeed, be no necessity that it should confine its operations to the class of industries we have indicated; but as the mines and the petroleum interest would give ample support to a company of the means above indicated, it would be well, for very obvious reasons, that a company aiming to cooperate with that interest should concentrate its whole management thereupon. Institutions of this class have been established in Paris and London with eminent success, showing that they are adapted to the public wants. The Credit Mobilier of Paris, within the first five years of its organization aided in the construction of railways, in Spain, Russia, Switzerland and Austria, by loans to the enormous aggregate of 1,500,000,000 francs. Within the five years, 1853 to 1857 inclusive, that corporation made net profits amounting to 60,500,000 francs—the amount of its capital—or an average of 20 per cent. per annum In London, similar associations, established within the last four years, have thus far worked with much apparent success, and have made a handsome division of profits among the stockholders.

As it is the peculiar business of these institutions to aid enterprises good in themselves but not sufficiently known or understood by any existing monetary institutions to command their assistance, it would seem that in no country in the world are they so much needed as in the United States. Every day we are having fresh discoveries in our vast domain, of new sources of wealth, capable of being made highly remunerative, but which are neglected from the difficulty of finding capitalists ready to give their attention to the facts and to invest their capital if the investigation should prove satisfactory. We, above all countries, need an institution which shall bear the same relation to that enterprising class, who are the pioneers of commerce and civilization—our inventors and explorers—as the banks bear to the ordinary operations of commerce A company that would calmly pass judgment upon the thousand new enterprises that turn up every year, selecting for its support those of greatest promise, would be an eminently American institution and would realize profits proportioned to the large gains that usually accrue to successful new enterprises —*Economist.*

☞ R. R. SUPERINTENDENTS would oblige us by sending their latest reports.

## JOURNAL OF RAILROAD LAW.

### CONVERSION OF SCRIP INTO STOCK.—SCRIPHOLDER NOT A STOCKHOLDER.

The case of Brown against The Lehigh Coal and Navigation Company, lately decided in Pennsylvania, is interesting, as deciding that scrip issued by a corporation is the sole evidence of the contract made between the company and its stockholders, and no dividends can be said to be due on such scrip, or on the stock into which such scrip has been converted, except such as may have been declared subsequent to the conversion of the scrip in question It also holds that the holders of scrip are not stockholders by virtue of their scrip alone, but they would only become such where the funded debt of the company had been extinguished, and therefore the contract would not justify a claim to cash dividends of profits made prior to the conversion of his scrip into stock by the claimant stockholder

The opinion of the Court was delivered by STRONG, J.—The rights of the complainants must be determined by the contract under which alone they can claim, and that contract is found in the scrip issued by the company. It is to be observed before proceeding to consider what its provisions are, that it was a contract made by the company with its stockholders, and with all of them, assuring to each an advantage exactly proportioned to his interest in the property of the company. It was a distribution of rights, whatever the rights may have been, among the corporators. And the present complainants. even if purchasers of scrip, have no rights superior to those which were given by the contract to the original distributees.

Looking, as we must, to the scrip alone as the evidence of the contract, and regarding it as the foundation of whatever rights the complainants have, we have no hesitation in saying that they are not entitled to any dividend on their scrip, or on the stock into which their scrip has been converted, except such as may have been declared subsequently to the conversion of their scrip They were never stockholders by virtue of their scrip alone, not even stockholders with a right to cash dividends postponed. They were holders of nothing more than an engagement of the company that they might become stockholders after the funded debt of the company had been paid off or adequate provision had been made for its discharge when due and payment demanded. The language of the certificate is that the persons to whom scrip was issued "will be entitled" to shares of stock, when certain things shall have been accomplished—not that they are presently entitled, with payments of cash dividends postponed. Every part of the instrument excludes the idea of their being stockholders or having any rights as such until the certificates should be converted into stock. Not only the declaration that they should not have any cash dividend until then, but the provision that they should be entitled to a *pro rata* share of any future distribution of scrip, negatives the existence of any right as stockholders. It was wholly unnecessary to make provision for their sharing in future distributions of scrip, if they became stockholders by virtue of the scrip they held. So the alternative provision that the certificate might be converted into stock at any time upon its surrender, and the payment by the holder of the par value of the stock, either in cash or six per cent. loans of the company, expresses in no doubtful terms the intention to give no immediate rights of a stockholder.

The argument, then, that the scripholders became at once joint owners of the property of the company, and as such entitled to share in its profits, the realization of their share being only postponed for the security of the loanholders, has no foundation in the contract. It is insisted, however, that the clause denying cash dividends, until the certificates had been converted into stock, (which could only be after the funded debt of the company had been paid off, or adequate provision made for its discharge when due and demanded,) is substantially a negative payment. The scripholders say, the complainants were not entitled to cash dividends until such payment of the debt or provision made for it, but then they became entitled not only to such as might therefore be made, but to such as had been made before, between the issue of the scrip and its conversion In other words, it was only the payment of cash dividends and not the dividends themselves that was postponed. But this is utterly irreconcilable with the language of the certificate, and even with the words of the extending clause. It is the dividend itself, the declared of the profits which is denied instead of the right to payment at the times when declared dividends became payable to stockholders generally. If it be asked, why then was this clause introduced at all, the answer is ready. It was to exclude any possible inference of right to profits which might be supposed to be deducible from the clause immediately preceding, which declared that the scripholder should be entitled to a *pro rata* share of any future distribution of scrip. Admitting as this last mentioned clause did, their right to be possible distributees of scrip, it was a prudent precaution to negative expressly any claim to dividends of profits.

It would, therefore, in our opinion, be a very strained and unnatural construction of the contract, were we to hold that the scripholder, after the conversion of his scrip into stock, is entitled to cash dividends of profits antecedently made. The obvious meaning of the language is, we think, that the stock, when issued, shall stand on a level with other stock, instead of having then an advantage over it. The case is in close analogy with that of a merchant who promises to receive another into partnership at a future day, declaring that meanwhile he shall have no share of the profits of the business. It could not be pretended that the partner taken in could claim, when received, a share of the profits made after the formation of the contract, and before its consummation.

But it is said the contract must be read in the light of the circumstances surrounding it when it was made, in order to understand more perfectly its meaning. That might be if its meaning was doubtful. But in this case we discover nothing obscure in the instrument by which the contract was evidenced Nor is there anything in the circumstances to which we are referred that tends to throw doubt upon the construction we have given to it. Surely the consideration for the promise of the company can shed no light upon the meaning of their promise. Whatever may have been the reason for engaging with their shareholders that they should be entitled to shares of stock at a future time, the nature and extent of the engagement, it having been express, is to be deduced from the words in which it is made. We are pointed to the resolution of the stock holders adopted May 1st, 1865, by which it was recommended to the Board of Managers, should they deem it expedient, to issue the scrip This, it is said, shows an intention to make the scripholders substantially stockholders, only postponing the payment of cash dividends to them until the scrip should be converted into actual stock. Suppose it does show this. How can it affect the contract subsequently made? The resolution itself was not a contract with those who might become scripholders—a contract that gave them any rights. The stockholders at their meeting had no power to make any such contract binding on the company. Under the charter such a contract could be made only by the managers. And the resolution attempted no such thing. It merely recommended to the Board of Managers to issue scrip, assuming certain rights should they deem it expedient. The whole matter was left to the discretion of the Board. If the Managers afterwards issued scrip, promising less than was contemplated by the resolution, how can the intention of the stockholders affect the contract? How can that intention enlarge the meaning of the engagements assumed by the Managers? Admit that the Managers were agents of the stockholders. If an agent makes a contract for his principal, promising to do less than his principal authorized, does it bind the principal to do anything more than the agent promised? Or does the authority given by the principal throw any light upon the meaning of the agent's express contract?

But even if the resolution of the stockholders could be introduced into the contract, we do not perceive that it would give the complainants any right to back dividends It is true that the scrip proposed to be issued was recommended to be in places of loans of the company, to be canceled simultaneously with the issue of the scrip. That must have referred to the portions of loans of the company which they had purchased, and which they held uncanceled to secure the payment of the mortgage of March 7th, 1842, or such portions as they might thereafter purchase and thus hold, for the loans were to be canceled simultaneously with the issue of the scrip, and they could not be canceled unless held by the company. But the interest of all loans thus purchased and held uncanceled was a fund for the payment of the mortgage; not for the payment of what the company held, but primarily for the payment of the loans not redeemed. If, therefore, the scrip took the place of loans of the company, (which is not asserted in the contract), its income was to be applied not to the scripholder, but to the payment of outstanding debts of the company secured by the mortgage. It would seem then that this provision in the resolution, that the scrip should stand in place of loans to be canceled simultaneously with its issue, if it was designed to enter into the contract at all, is inconsistent with the existence of any intention of the stockholders that the scripholder should have a right to interest or dividends on his scrip with the payment deferred. It is, however, most probable that it was intended rather as a distinction to the Managers respecting the affairs of the company, than a recommendation of what should be incorporated in the contract.

As did the scrip, so the resolution prohibited any cash dividend to the scripholders until the time for conversion into stock arrived, and for the same reason in both. It was manifestly because the scrip had been declared entitled to share in any future distribution of scrip. There could be no other dividend than one in stock, or in scrip, or in cash, and a dividend in stock was rendered impossible by the restrictions of the mortgage. A prohibition of cash dividends was therefore a denial of right to share in the earnings of the company while the scrip remained unconverted.

The resolution also recommended that the stock, when issued in lieu of the scrip, should stand in all respects on the footing of the now (then) existing stock. It is asked how can it be on the footing of the stock then existing unless entitled to all the dividends awarded to that stock since the resolution was passed? The question points to a very forced construction of the language. The stock then existing would of course continue to exist when the scrip should be converted. Its footing at the time of the conversion was the footing spoken of. The relative condition of the old and the new stock to the company was then to be the same The resolution did not recommend that the new stock when issued should be on the same footing as the stock existing in 1855 was at that time. It is impossible that the issue of stock in 1863, or 1864, can give all the rights to the new stockholder which belonged to holders of stock in 1855. They can be on the same footing, that is, in the same condition relative to the company for the future, but not for the past. The stockholder of 1855 had a right to vote in that year, or to become a manager, as well as to receive dividends. How can he who became a stockholder in 1864 enjoy all those past rights? The language of the resolution as well as that of the scrip is all prospective. It provides for what is to be after the conversion of the scrip.

There is nothing, then, in what is called the surrounding circumstances, and nothing in the resolution of the stockholders adopted in May, 1855, that would justify such a construction of the contract as that for which the complainants contend. They are not entitled to any other dividends than such as may be declared to all other stockholders and declared after the conversion of their scrip.

The decree made at *Nisi Prius* is therefore affirmed.

## OUR ENGLISH VISITORS AND AMERICAN RAILROADS.

An *ignorant* Englishman is the last person from whom we should expect to find an impartial judgment on the merits and demerits of American Railways; an *intelligent* Englishman would probably render as fair a decision respecting both as is to be obtained. He knows the difficulties and drawbacks attending the system in his native island; and if he finds drawbacks and difficulties, though of quite another kind, attending *ours*, he is prepared to make due allowance therefor On this account, we regard the visit of Sir Morton Peto and his companions to this country, for the purpose of making a personal inspection of our public works, their wants and resources, as an event of considerable importance financially; in addition to the service which it will render in recementing between the two nations the friendship that had been checked, if not broken, by the affairs of the past five years.

In some respects the visit takes place at an inconvenient time for us, as far as presenting the best appearances is concerned There is no denying, that in consequence of the vast demands made upon our leading lines since 1860, and the extraordinarily high prices of labor and materials, our public works are in a rather poor condition for presentation at this moment. They have no holiday dresses to put on; but must show themselves in everyday attire, and sometimes very common at that. Railroad managers have reasoned thus: "It is true our line is in need of a double track, better bridges, station houses, &c.; but the probability is that with the termination of

war there will be such a decline in prices that we shall be able to make those improvements at fifty per cent. of what they would now cost; so let us wait awhile. If we proceed to expend our means freely *now* in new buildings, tracks, and other permanent improvements, the money value of which is liable to shrink from 25 to 50 per cent. at any moment, not only will our stockholders justly find fault with us for such a piece of extravagance; but the public, and even the journals so loudly demanding better accommodations, will treat us with contempt"

By such reasoning, sound in many cases and plausible in all, delays have been allowed to take place, the consequences of which are rough tracks, insufficient machinery and rolling stock, dilapidated buildings, &c., to a greater or less degree. Most of our leading lines have been worked at a profit, and are now earning reasonably well, in spite of the sudden cessation of the war demands; yet they are not in such condition to be presented advantageously to a foreign investigator, as we might desire.

The gentlemen examining them, however, have unquestionably studied our affairs sufficiently to take in at a glance the causes which have brought about these temporary defects. If they observe in all cases lighter rails used than in Great Britain, tracks less carefully finished and guarded after completion, a smaller amount of locomotive power used, less extensive and costly buildings for depots and station houses, they will readily bear in mind the different conditions under which the railroad systems of the two countries have been constructed In Great Britain a vast and varied industry, a dense population existed before the advent of the railway; here, both had to be created in a great measure *after* that advent, to which, indeed, it was rendered subservient in no slight degree. There, the iron track was laid to accommodate the travel and transportation already existing; here, it has been put down, especially in our Western States, to bring travel, trade and industry. Excepting near the seaboard, our population is still comparatively sparse. Three miles of track must be built in the United States for one in England to reach a given number of inhabitants, with a corresponding volume of freight business. Of necessity, we had to build our works more cheaply than they, leaving to time and progress their proper completion

That completion had not taken place when the war broke out, not even upon our great trunk lines, much less upon their feeders or the system created in the Southern States. In the one, little if any progress has since been shown; in the other, a vast amount of damage has been inflicted, directly by the destruction of rails, ties, bridges, depots, &c.; indirectly by almost annihilating much of the business upon which those railroads depended

These are the drawbacks to which we referred at the opening of this article. But an intelligent observer, whether American or foreign born, cannot fail to perceive that out of the calamities through which we have passed arise assurances of safety, such as we could never before present to the outside world. It has been proved that our Government and people have the means of concentrating power, during times of public danger, as well as of diffusing it among the States and municipalities during times of repose. The rule of mob law has forever ceased on this continent. All threats of revolution by force have been buried for the next hundred years at least, and we fondly trust for all ages to come. At the same time, extremists on all sides have learned the danger of irritating any section of the people on account of the supposed cowardice of their natures. The North as well as the humiliated South has taught a salutary lesson in this respect. Fitz James and the Douglas have both "much forgiven," and are forgetting as fast as they can. In point of stability, fixedness of purpose, we stand to-day in the world's estimation many cubits higher than we could possibly do before the war. The passage of such immense bodies of troops back and forth over the American continent has increased rather than diminished our national desire of travel, so that our railroads will reap a permanent as well as a temporary increase to their passenger business. Not only so, but in the great event of emancipation, to be followed by a new and superior labor system at the South, we see the approach of a day, not far distant, when the railroad property of Virginia, Kentucky, Tennessee, the Carolinas and the whole Southwest will be more valuable than at any former period. It is certain that a future development awaits that magnificent section of country far exceeding any progress that has taken place in the past, be that ever so wondrous. The course of migration, whether American or European, is to be largely southward, instead of being only from east to west. With this will follow a corresponding interchange of commodities, the repairing, and even the reconstruction of many of the Southern railroads. War is over: the armies have been disbanded at a rate which none of us hoped to witness; guerrilla fighting has nearly altogether subsided at the South, thus also exceeding our liveliest anticipations. The Southern people are not resigning themselves to destiny, with the fatalism of Turks, but *accepting* the course of events with a hearty good will, which promises to generate a friendship, such as never before existed Such is our situation at this moment. If it be supposed that this is an attempt to paint the future in too brilliant colors, we ask whether the history of the past season does not justify all these anticipations and even more glorious ones still —*Am. R R Journal.*

## THE GREAT RAILROAD SUIT.

LA CROSSE & MILWAUKEE R. R.

The Supreme Court of the United States, in February, 1864, directed that a decree be entered, fixing the amount due on the second mortgage for interest, and that if it was not paid within one year, that an order to sell the road should be entered

On the 27th day of September, 1864, the decree fixing the amount at about $405,000.—Since then two instalments of interest have fallen due, amounting together to $80,000. There has been paid by the receiver to apply on these two sums, $62,440, leaving the amount now due for interest, over $430,000

The year allowed for the payment of this amount expired September 27th 1865, and on the 28th instant, the order to sell the railroad from Milwaukee to Portage was entered, directing the Marshal to advertise the same for twelve weeks. We understand that the sale will be advertised for the 3d day of January next. The decree is for about $430,000 interest, and $1,000,000 of principal, and is subject to the first city mortgages of about $1,200,000. The sale can be prevented by the payment of the amount of interest.—*Milwaukee Wisconsin.*

## NEW RAILWAY SHACKLE.

An English machinist has invented a new shackle for coupling railway cars, which we should suppose to have some considerable merit. Each car has a reversible screw wedge and bell-mouthed cone, so that, by the working of a lever over it, either may be put in position as wanted. Supposing two cars approaching each other, one with the bell-mouthed cone in a horizontal position and the other with the screw wedge in a similar position, they are self-acting. The wedge goes within the bell mouth, where there are four spring catches which at once seize the screw and hold it, so that the coupling is effected in an instant, without the intervention of any one to guide it in any way. To uncouple the cars, a person at either side of the line is within reach of short levers which liberate the screw from the spring catches, and the uncoupling is effected as rapidly as the coupling. As this invention does away with all need for the brakemen to go between the ends of the cars to shackle them, we hope it may prove sufficiently successful to meet with the approval of railway engineers and directors, and be universally adopted.

## VERMONT CENTRAL RAILWAY.

A special meeting of the holders of the first and second mortgage bonds, was held in this city on the 29th ult., to hear and act upon the report of a committee previously appointed to suggest a plan of settlement between the two classes of bondholders; the plan being in brief as follows:

(1) The principal and interest of the First Mortgage to be fixed at three million dollars, bearing interest at seven per cent., payable semi-annually; (2) the principal and interest of the Second Mortgage to be fixed at one million, bearing seven per cent, semi-annually; (3) the Philadelphia interest in the Second Mortgage Bonds to subscribe and pay two hundred thousand dollars on the new eight per cent. loan to be raised, in five equal instalments of two months each; and the other interests to raise fifty thousand dollars in like manner; (4.) the First Mortgage bondholders agree to pay in two hundred and fifty thousand dollars of said loan; (5.) the Trustees agree to procure subscriptions for two hundred thousand dollars balance of said loan; (6.) the ratifying parties are to petition the Chancellor to embody these stipulations in a decree to be issued for the determination of the rights of all concerned; (7) the interest to be paid on the first mortgage bonds is restricted to seven per cent on two million dollars till the earnings of the road shall justify the payment of interest on the third million dollars, and the interest on the second mortgage is to be paid on the first day of June, 1867, for the previous six months, if the earnings of the road will justify it; (8) the priority of liens is to be preserved; (9) pledging the best efforts of all parties interested for the accomplishment of the enterprise and providing that no personal responsibility shall attach to any party signing the agreement.

The agreement of the committee, after a long discussion, was unanimously ratified and adopted. —*Am Railway Times.*

The earnings of the Chicago and Alton Railroad for Sept, 1865, were.....$399,602 00
Sept., 1864..... 354,554 00

Increase..... $45,048 00

## A RACE BETWEEN STEAMSHIPS IN THE BRITISH CHANNEL.

On Saturday last a steamship race of great interest in the present state of naval architecture took place on the passage across the Channel between Newhaven and Dieppe. The new vessel, named the *Bordeaux*, tried for the first time on Saturday, belongs jointly to the London and Brighton Railway Company and to the French company, whose lines run from Dieppe to Paris in connection with the English company, and has been built and engined by Mr. Charles Lungley, at Deptford green, whose method of constructing fast steamers was so signally successful in the case of the *Marseilles*. The great interest of the trial lies mainly in the fact that the new sectional form of bow, which has been introduced in her Majesty's paddle dispatch-steamer *Helicon* with marked advantage, and likewise in the armor clad frigates *Bellerophon*, *Pallas*, *Lord Clyde*, etc., has been adopted independently and simultaneously by Mr. Lungley with remarkable good results. The *Bordeaux* has been built, not for speed or even for passenger traffic exclusively, but to combine with these a great cargo-carrying power which is becoming continually more and more necessary on the Newhaven and Dieppe line of steamers, owing to the great development of trade between England and France that has marked the progress of the last two or three years. She is 210 ft. long, of 23½ ft. beam, 11 ft. in depth, tonnage 576 (builders' measurement), and fitted with engines of 180 horse power (nominal) on the oscillating principle, with brass tubular boilers and patent feathering floats; the engines as well as the ship having been constructed at Mr. Lungley's establishment. The vessel selected to compete with the *Bordeaux* was the *Lyons*, a very fast steamer, built, with almost exclusive regard to speed, by the late firm of Messrs. Scott, Russell & Co., and now furnished with new and powerful boilers to prepare her for this trial. The two vessels left Newhaven at about 11 A M., the *Lyons* having the advantage by about two minutes, and when the more burdensome and commodious *Bordeaux* followed it involved a reversal of all old established ideas of shipbuilding to suppose that she could ever overtake, even with so slight a difference at starting, the sharper and fleeter-looking vessel. A very short time, however, sufficed to enable the *Bordeaux* to overhaul the *Lyons*; but she had scarcely done so before some cause for a temporary stoppage of the former ship arose, and she was soon left far behind. This incident, however, only showed the new vessel to greater advantage, for after again starting on her stern chase she gradually drew up to her competitor, passed her, and entered Dieppe harbor at least seventeen minutes in advance of her, amid a crowd of spectators who cheered her arrival, which was succeeded by an international dinner and display of fireworks.—*Engineer.*

---

Four locomotives and six cars were destroyed this week by collisions on the Little Miami and Marietta (Ohio) Railroads within 24 hours. The accidents occurred on a single track. No lives lost.

---

The Erie Railway Company has not yet agreed to build a double track from Salamanca to New York to accommodate the business of the Atlantic and Great Western road, nor has it agreed to *pro rata* with the latter upon its eastern bound traffic.

## LONDON PNEUMATIC RAILWAY.

The transmission of carriages for passengers through metallic tubes is now about to be tested on a large scale in London, and in circumstances that will bring out more clearly its capabilities. The tube, which will be 12 feet in internal diameter, will begin at a station in Great Scotland Yard, pass through the Thames Embankment to the river, across which it will be carried to a channel sunk for the purpose, and filled in with concrete; it will thence pass, under College street and Vine street, to a terminus convenient to that of the Southwestern Railway at Waterloo Bridge. The river will be prepared for the reception of the tube by sinking three piers, by means of iron caissons. When these have been brought sufficiently near the bed of the river, the upper portions of the caissons will be removed, and the channel for the tube will be dredged down to the upper course of masonry. The tube will be lowered in four sections. The trains, which will be commodious and well lighted, will be dispatched at intervals of three minutes being drawn in one direction by exhaustion, and impelled in the other by pressure. The works will be completed in twelve months from their commencement, at a cost of £130,000. The pressure required when the carriages are within the tube—an arrangement not only proposed, but tried, forty years ago—is but the one-fortieth of that which was necessary with the old pneumatic railway system, with which a continuous valve, subject to serious leakage, was required. It is asserted, however, that compression will not answer as well for the propulsion of the trains as exhaustion; the action of the latter being instantaneous, while that of the former is slow and comparatively insignificant. It appears that if a lighted taper is placed in one end of a sufficiently long pipe, a forge bellows at the other end will not blow it out. The matter will, however, very soon be tested, and, should it be necessary, exhaustion can be used in both directions, but will, in certain cases, entail the expense of an additional steam engine. —*London Artisan.*

## LEVEEING THE MISSISSIPPI.

The levees whereby the waters of the Mississippi, when in flood, are restrained from inundating the adjacent country, have been mainly neglected for the last four years, besides having suffered great damage from belligerent operations. Either side cut them whenever a temporary advantage might thereby be gained; so that the War left them in a state of general dilapidation and ruin.

A few slight and partial repairs have since been made; but they are still in such condition that vast tracts of the richest lands cannot be safely cultivated, while some cannot be cultivated at all. And there is danger that a partial reconstruction may aggravate the evils and perils now imminent. For the channel of the lower Mississippi is inadequate to the conveyance of all the water poured into it when in flood, so that regulated outflows through the Atchafalaya, Lake Pontchartrain, &c., are essential to protect several of the lower parishes of Louisiana from disastrous inundation.

There is urgent need, therefore, of science and system in leveeing, so that no locality shall protect itself at the cost of others. And as three or four States are interested, it seems essential that the surveys and plans should be directed and controlled by a common authority.

To await the action of Congress is to brave the peril of a destructive, desolating flood next Spring, which will derange the industry of the Mississippi lowlands for years, and inflict untold misery on their cultivators. We could wish, therefore, that the President might feel authorized to direct the officers of the Coast Survey and of the Engineer Corps of the Army to make the requisite surveys and plans forthwith, in anticipation of the action of Congress. We have no doubt that either an appropriation for leveeing will be made next Winter, to be repaid by assessment on the lands thereby benefited, or the States more especially interested will be called on to do the work in accordance with the plans thus devised and recommended. And it seems to us that Congress should and will order the work done forthwith, and indicate the mode of equitable assessment whereby its cost shall be reimbursed to the Treasury.—*Tribune.*

---

SUPREME COURT—CIRCUIT—OCT. 12—Before Justice SUTHERLAND.

STOCKBROKERS MARGINS.

Thomas Hope *agt* Charles E. Lawrence.

The plaintiff had directed the defendants to purchase $5,000 in gold for him, depositing with them 45 half shares of the Merchants' Bank as collateral. He now brings his action to recover the shares. It appears from the evidence that he directed them in January, 1864, to sell his gold if it reached during that day 217. During the day it varied from 212 to 220, but the defendants thinking it so strong as to justify them in holding on for a further rise. Unfortunately for them the market broke. Subsequently the plaintiff tendered them, the amount which would have been due, had they sold at 217, and demanded his shares back. They returned some shares, holding the others for his margin. The question in dispute was whether, as the plaintiff claimed, he had given positive directions to the defendants to sell at 217 or had merely given them a discretionary power to sell at a price over 217, if they should think it best. The jury found a verdict for the plaintiff for $865-89.

HEAVY DAMAGES AGAINST A STAGE COMPANY.

Ann Lozier *agt* The Kickerbocker Stage Co.

In this suit the plaintiff asked $15,000 damages for injuries sustained by the negligence of the Stage Company. In Broadway, between Broome and Spring sts., about eighteen months ago, she signaled a stage, and, while getting into it, the stage started suddenly and threw her down, fracturing her thigh. The lady still limps, her leg being considerably shortened, and the jury gave her a verdict of $4,000.

---

MARIETTA RAILROAD—COMPLIMENTARY PRESENTATION.—On Saturday evening last, Mr. John Durand, the retiring Superintendent of the Marietta & Cincinnati Railway, was complimented by the employes of the road in a very flattering manner. A committee of their number waited upon him at his residence and presented him, as a token of their esteem for, and confidence in him as a railway manager, with a fine Jules Jergensou chronometer watch, from the establishment of Duhme & Co.

This road will be operated under the general superintendence of the Vice-President, (now acting President) W. P. Cutler, Esq., and Mr Orland Smith, Master of Transportation. The new through trains, connecting with the Baltimore & Ohio Railroad, are succeeding better than it was expected they would succeed.

## RAILROADS IN THE WEST.

A letter from a correspondent of the N. Y. *Times*, dated Chicago, Sept. 18th, says: "The railroad era in the West is not yet passed: Roads are being constructed in various directions—mostly short connecting lines, aside from the prosecution of the great trunk lines westward toward the Missouri river. One road well under way is being constructed from Jacksonville to Alton, about midway between the Illinois river and the Chicago and St. Louis Road. It has been completed to Carrollton, the county seat of Greene county. Another line is being constructed through the western tier of counties, parallel with the Mississippi, north of Rock Island. It is also proposed to continue it south to intersect with completed roads at Galesburg. Two lines are projected in the southern part of the State—one from St. Louis to Cairo, west of the Illinois Central, and the other from Vincennes, Ind., to Cairo, east of that road. One or both of these will soon be built. Forty-two miles of the Springfield and Northwestern Road have been put under contract, and are to be constructed forthwith.

"In Iowa, new enterprises are continually being entered upon. A link about forty miles in length from Cedar Rapids north, has been recently completed, of what is eventually to be an important line. St. Louis is stretching out her iron arms northward, to compete with Chicago for the trans-Mississippi trade. She has already entered upon an enterprise contemplating the construction of a trunk line north and south through Iowa, to extend eventually to St. Paul. The railroads leading from this city to the Mississippi, have, by their exorbitant freight charges, caused much indignation among the farmers of Iowa, and inclined them St. Louisward, if proper transportation facilities are offered, and of this feeling our go ahead neighbors at St. Louis are disposed to take all proper advantage."

## SOUTHERN RAILROADS.

The *World's* Nashville correspondent says: The railroads in this State have all been turned over to the companies to whom they belong, in compliance with a late order from the War Department. There are nearly a dozen companies in the State who are straining every nerve to put their roads in good traveling condition.

A large force of workmen are employed on the different roads, repairing tracks, building bridges, and otherwise improving the general condition of the roads. A large amount of railroad material belonging to the Government has been purchased by companies from Alabama, Georgia, Mississippi and Florida. A large amount has been turned over with the roads on which it has been in use during the war, for which the Government will be remunerated at some future day. Arrangements have been made binding holders of stock to that effect.

A dispatch from Lawrence, Kansas, says the Commissioners appointed by the President to report on the union of the Pacific Railroad had a meeting, and could not agree. Two reports will be made. The majority report against, the minority in favor of, accepting the road. Passenger and freight trains are making regular trips over the road.

---

The earnings of the McGregor Western Railroad Company for the fourth week of September, 1865, were $10,373.37.

## BALTIMORE AND OHIO RAILROAD EXTENSIONS.

Two very important railroad enterprises are now under full headway. The one is the construction of a railroad from Washington to Point of Rocks, on the Baltimore and Ohio Railroad near Harper's Ferry; and the other is the completion of the Pittsburg and Connellsville Railroad between Pittsburg and Cumberland the latter also a point on the Baltimore and Ohio Railroad, 178 miles west of Baltimore. The Point of Rocks road will be 40 or 50 miles long. It is 70 miles now from Baltimore to Point of Rocks, and 91 miles from Washington to Point of Rocks by the present railroad. By the new road it will only be 40 or 50 miles to Point of Rocks from Washington. It is being built by the Baltimore and Ohio Railroad Company. The Pittsburg and Connellsville road is 148 miles long; 59 miles are completed and in operation between Pittsburg and Connellsville; the remaining 89 miles will be completed, it is hoped, in about a year. When these two links are completed, there will be an air line railroad from Chicago to Washington, as follows: Chicago to Pittsburg, by Fort Wayne and Chicago road, 468 miles; Pittsburg to Cumberland, by Pittsburg and Connellsville road 148 miles; Cumberland to Washington, by Baltimore and Ohio and Point of Rocks road, 155 miles—total from Chicago to Washington only 771 miles, or 71 miles shorter than the present shortest route by way of Harrisburg and Baltimore. The difference in time, however, will be still greater. It now requires 40 hours to go from Washington to Chicago. By the new route through trains can easily be run in 30 hours, and that will be only 25 miles per hour.—*Baltimore American.*

---

R. R. Bridge Burned at Greenwich, Conn.—On the 14th inst., the railroad bridge on the creek near Greenwich, Conn., was discovered to be on fire. The flames spread rapidly and nearly the whole of the bridge was destroyed. A train had passed over a short time before the breaking out of the flames, and it is supposed the fire caught from the sparks from the locomotive. The night train going east arrived while the bridge was burning, and the passengers were ferried across and carried around in carriages. One of the passengers belonging in Boston accidentally fell through a culvert, and was seriously injured. The New York train did not reach New Haven till about 6 o'clock Sunday morning, where the Boston 8:30 train of the evening before had been detained. This latter train reached the creek about 6 a. m., and through the neglect of the railroad officials to provide suitable means of transportation around, was still further detained till 12 o'clock, only reaching this city at 1½ p. m. Sunday. It will be some time before the damage caused by the accident can be repaired.—*Tribune.*

---

A safe of the Erie Railway Company was broken open on the night of the 11th inst at Port Jervis, and $20,000 stolen. Most of the money has since been recovered.

---

By way of the river and the New York Central road, very low special contracts have been made for freight, and the rates upon several classes are as low as were ever known. This is the first appearance of competition among the roads, and cannot be checked too soon by their managers, if they expect to continue dividends.

## RAILROAD NEWS.

Washington, Oct. 14.—The Postmaster General has ordered the resumption of mail service from Savannah to Macon. This puts Milledgeville in communication by railway with all the principal cities of the South and West.

---

The South Carolina Railroad.—The South Carolina Railroad is completed to within twelve miles of Columbia. It is expected cars will run through on the 20th of this month.

---

Collision on the Harlem Railroad.—At ½ o'clock on Saturday morning, a gravel train on the Harlem Railroad, at the corner of Fifty-fourth street and Fourth avenue, ran into a lager beer wagon, driven by Charles Roser. The wagon was demolished, one of the horses instantly killed, and the driver severely injured. The latter was taken to St. Luke's Hospital.

---

Change of Time on the I. & C. R. R.—On Monday, October 16th, the following changes occurred on the Indianapolis and Cincinnati Railroad: The through trains for Indianapolis, St. Louis and Chicago, leave at 7.30 A. M., 2 P. M. and 5 15 P. M.; returning, arrive at 10:30 A. M., 4:45 P. M. and 1:30 A. M. The Lawrenceburg and Harrison trains leave at 9:25 A. M. and 4:30 P. M.; the morning train at 7:30 A. M., and the evening train at 5:15 P. M.

---

Atlantic and Great Western Railway. New York, October 14.—The *Commercial* says a communication has been addressed by English visitors connected with the Atlantic & Great Western Railway, through the American President of the road, S. S. L'Hommedieu, to the Directors of the Erie Railroad, proposing to consolidate the running arrangements of the two roads, and to double track the Erie Road from New York to Salamanca with British capital. A conference has been held between Sir Morton Peto and Mr. McHenry, on the part of the Atlantic & Great Western, and the Erie Directors, upon the matter, but as yet no definite conclusion has been reached.

---

Philadelphia, Oct. 15.—A dispatch from Lancaster gives the following explanation of the railroad accident yesterday:

Yesterday afternoon, as the day express train going East on the Pennsylvania Railroad was within four miles of this city, an axle of the third passenger car broke, part of which struck the bottom of the car near the front end and tore out part of the bottom, precipitating the occupants of three seats on each side to the ground, where they were run over by the wheels of the rear trucks. Eight persons were killed outright, and another died some hours afterward.

The following is a list of the killed by the accident: Mrs. Barr, wife of Jas. P. Barr, of Pittsburg; Sarah Willet, of New Cumberland, Pa.; Colonel Butler and wife, of Lewistown, Pa.; W. H. Butler, clerk in the Surgeon General's office of Pennsylvania; Mrs. Uretta or Getta, of Milwaukee; one lady unknown, and two girls, ten and eleven years old, unknown.

---

Depot Burned. *Chicago*, Oct. 16.—The Freight Depot, formerly owned and occupied by the Cincinnati Air-Line Railroad, and more recently by the Chicago & St. Louis Railroad, located near the river, on the west side, just south of Randolph street, took fire this evening about seven o'clock, and was completely destroyed, together with its contents.

## MONETARY AND COMMERCIAL.

There has been but little change in the gold market during the past week, and the rates are quoted at precisely the same figure as in our last issue. The demand for money has been active, and the supply steady for first-class paper. The volume of currency in the hands of our bankers augments daily.

In view of the conservative policy to which the Secretary of the Treasury is pledged, and his evident determination to work back to specie payments, the fewer debts people incur the better.

The following are the quotations for exchange and coin:

| | Buying | Selling. |
|---|---|---|
| New York | ¼@⅜ dis. | 1 10 dis@par. |
| Philadelphia | ¼@⅜ dis. | 1-10 dis @par. |
| Boston | ¼@⅜ dis. | 1-10 dis @par |
| Gold | 144@145¾ | 146@146¾ |
| Silver | 136@137 | 137@138 |

Stocks ruled as follows at the closing of the Board on Tuesday and Wednesday:

| | Tues. | Wed. |
|---|---|---|
| U. S. 6 per ct. B'ds. 1881 | 107⅞ | 107⅛ |
| " 5-20 " old | 104⅜ | 104⅜ |
| " 5-20 " new | 102⅛ | 10 ⅜ |
| " 10-40 " | 93¼ | 93¼ |
| " One-year Certificates | 9-⅝ | 9-⅝ |
| 1-30s | 98¼ | 9-¼ |
| New York Central | 97⅝ | 9- |
| Erie | 9- ¾ | 91 |
| Hudson River | 106½ | 107⅝ |
| Reading | 115⅜ | 116 |
| Michigan Central | 114 | 115½ |
| Michigan Southern | 74½ | 74⅝ |
| Illinois Central | 137½ | 137 |
| Cleveland & Pittsburg | 76⅝ | 77 |
| Chicago & Northwestern | 30⅝ | 30⅜ |
| " " pref | 64½ | 64¾ |
| Cleveland & Toledo | 103 | 102½ |
| Rock Island | 108¼ | 109 |
| Pitts., Ft. Wayne & Chicago | 9-⅞ | 82½ |
| Ohio & Mississippi Certificates | 2⅜ | |

Annexed are the comparative earnings of the Michigan Southern Railroad for the first week in October:

| | |
|---|---|
| 1865 | $114,944 |
| 1864 | 83,651 |
| Increase | $31,293 |
| From March 1: | |
| 1865 | $2,868,294 |
| 1864 | 2,352,975 |
| Increase | $515,319 |

The following are the comparative earnings of the Michigan Central Railroad for the first week in October:

| | |
|---|---|
| 1865 | $109,846 |
| 1864 | 85,425 |
| Increase | $24,421 |

Comparative earnings of the Rome, Watertown & Ogdensburg Railroad for the months of July, August and September:

| | |
|---|---|
| 1865 | $325,490 |
| 1864 | 243.350 |
| Increase | $82,140 |

The following are the comparative earnings of the Marietta & Cincinnati Railroad for the first week in October:

| | |
|---|---|
| 1865 | $25,831 |
| 1864 | 19,916 |
| Increase | $5,915 |
| From January 1: | |
| 1865 | $911,147 |
| 1864 | 704,274 |
| Increase | $206,873 |

Receipts of the Racine and Mississippi and Northern Illinois Railroads for the week ending October 7, were:

| | |
|---|---|
| 1865 | $19,917 10 |
| 1864 | 10,975 98 |
| Increase | $8 941 12 |
| Receipts from January 1 to October 7: | |
| 1865 | $516,985 31 |
| 1854 | 440,046 03 |
| Increase | $76,939 28 |

The earnings of the Erie Railway for the month of September were:

| | |
|---|---|
| 1865 | $1,345,456 52 |
| 1864 | 1,301,005 75 |
| Increase | $44,450 77 |

The Rome, Watertown and Ogdensburgh Railroad earnings were:

| | 1864. | 1865. |
|---|---|---|
| July | $71,351 50 | $89,978 44 |
| August | 84,483 12 | 103,625 75 |
| September | 87,515 52 | 131,885 45 |
| Total | $243,350 14 | $325,490 64 |
| Increase | | 82,140 50 |

The earnings of the Marietta & Cincinnati Railroad for the month of Sept.

| | |
|---|---|
| 1865 | $120,051 25 |
| Corresponding month of previous year | 93,077 63 |
| Increase | $20,973 62 |

The following is a statement of the business done by the Illinois Central Railroad for the month of September, 1865:

LAND DEPARTMENT.

| | | |
|---|---|---|
| Acres Construction Lands sold | 10,887.99 for | $132.061 52 |
| Acres Int. Fund Lands sold | 478.15 for | 7,335 53 |
| Acres Free Lands sold | 1,511.39 for | 20,520 99 |
| Total sales during month of Sept '65. | 12,877.53 for | $159,918 04 |
| To which add Town Lot sales | | 1.440 00 |
| Total of all | 12,877 53 for | $161,358 04 |
| Cash collected in September | | $219,312 00 |

TRAFFIC DEPARTMENT.

| | | |
|---|---|---|
| Receipts from | Passengers | $260,638 63 |
| do | Freight | 425,743 00 |
| do | Mails | 6.358 33 |
| do | Rent of Road | 4,000 00 |
| do | Other Sources | 10,000 00 |
| Total Receipts in month of Sept., 1865 | | $706,739 96 |
| Total Receipts in month of Sept., 1864 | | 799,235 92 |

The earnings of the Michigan Southern and Northern Indiana Railroad for the month of September, 1865, were: $484,173 00
Corresponding month of previous year: 402,219 00
Increase: $81,954 00

The earnings of the Michigan Central Railroad for the month of Sept, 1865, were: $460,661 23
Corresponding month of previous year: 408,444 58
Increase: $52,216 65

The earnings of the Chicago and Alton Railroad for the 4th week in Sept., 1865: $91,302 00
Corresponding week of previous year: 72,624 00
Increase: $18,678 00

The earnings of the Chicago and Rock Island Railroad for the fourth week in September, 1865 were: $86.407 00
Corresponding week of previous year: 74.295 00
Increase: $12,112 00

The earnings of the Grand Trunk Railway for the week ending Sept., 30, 1865, (including the receipts of the Montreal & Lake Champlain and Buffalo & Lake Huron Railways) were:

| | |
|---|---|
| Passengers | $66,645 00 |
| Express, freight, mails & sundries | 4,036 00 |
| Freight and live stock | 98,961 00 |
| Total | $169.642 00 |
| Corresponding week, 1864 | 119,447 00 |
| Increase | $50,195 00 |

The earnings of the Chicago and Northwestern Railway for the first week in October, 1865, were: $221,142 43
Corresponding week of previous year: 131,721 74
Increase: $89,420 69

The traffic of the Great Western Railroad for the week ending Oct. 6, 1865, was as follows:

| | |
|---|---|
| Passengers | $44,613 16 |
| Freight and live stock | 44.698 71 |
| Mails and sundries | 3,770 89 |
| Total | $92.082 76 |
| Corresponding week of 1864 | 62,120 48 |
| Increase | $28,962 28 |

The earnings of the Racine and Mississippi and Northern Illinois Railroad for the week ending Sept. 30, were:

| | 1865. | 1964. |
|---|---|---|
| Passengers | $5,601 73 | $4 579 07 |
| Freight | 17,521 81 | 14,535 09 |
| Express | 260 22 | 104 16 |
| Mail | 296 58 | 296 58 |
| Total | $23,680 34 | $19.514 90 |

Receipts from January 1 to Sept. 30:

| | |
|---|---|
| 1865 | $497,068 21 |
| 1864 | 429,070 05 |
| Increase | $67.998 16 |

The earnings of the Marietta and Cincinnati Railroad for the 4th week in Sept, 1865, were:

| | 1865. | 1864. |
|---|---|---|
| Passengers | $15.967 25 | $17,887 51 |
| Freight | 18 013 00 | 12,294 04 |
| Mail, Exp. & Tel. | 1,601 00 | 1,419 02 |
| Total | $35,581 25 | $31,600 57 |
| Total for the fiscal year com. Jan 1 | $385,315 28 | $684,358 31 |

The earnings of the Chicago and Rock Island Railroad Company for the month of Sept., 1865, were: $384,290 00
Corresponding month of previous year: 375,860 00
Increase: $8,430 00

# COUPON AND LOCAL TICKETS!

CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

CONSECUTIVELY NUMBERED

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD


## RAILROAD OFFICES AND AGENTS.

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St.

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A B Waters, Freight and Ticket Agent, Cor. Third and Walnut.

**Ohio & Mississippi**

W. E Bruce. Freight and Ticket Agent, Gazette Building, 82 West Fourth Street
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J. R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg Contracting Agent, Vine St. under Burnett House
H J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent, " "

**Central Ohio & Pittsburg, Columbus and Cincinnati.**

James E Shields, General Agent, No 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No 4 Merchants Exchange.

**Erie Railway.**

A J. Day, S. W Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J. W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Six h St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burnet House.

**New York Central.**

G. B Gibson, S. W. Passenger Agent. W. H. Page Local Passenger Agent, 8 and 9 West Third St.
Geo S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Ittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway, opp Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent, No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**
Depot in Covington.

Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

## Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY

| | LEAVE. | ARRIVE. |
|---|---|---|
| St Louis and Chicago Express... | 7:15 A M. | 9:00 A M |
| Springfield and St Joe Express.. | 1:00 P. M. | 9: 7 P. M. |
| St. Louis and Chicago Express... | 10: 0 P. M. | 5:0 0 A. M. |

Sleeping Cars by this train to St Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city. ROBT. MEEK Superintendent.

T. B. LORD, Gen'l Ticket Agt.

---

BENJ. H. LATROBE AND C. H. LATROBE,

CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.

Through to Pittsburg without Change.

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent.
my11 Pittsburg, Pa.

---

Change of Time. Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 5:0 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequaled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

---

# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9: 0 A. M. | 10.40 P M. |
| HAMILTON..... | 9:57 " | 11:43 " |
| DAYTON..... | 11:30 " | 12:55 A. M |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1: 0 P. M |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No 89 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat offices in the West and Southwest.

E. F. FULLER, Gen'l Ticket Agt. D. McLARE, Supt.
J. P. SARVER, } Passenger Agts
CHAS. COOK, }

---

## CENTRAL RAILROAD

—OF—

NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6: 0 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9: 0 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12: 0 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

---

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865

Passenger Station in New York, corner Twenty-Seventh street and Fourth Avenue Entrance on Twenty Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 5:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 5:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p. m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6: 0; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 9:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12: 5; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 1:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8.00 a. m.; 3:00 p. m

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

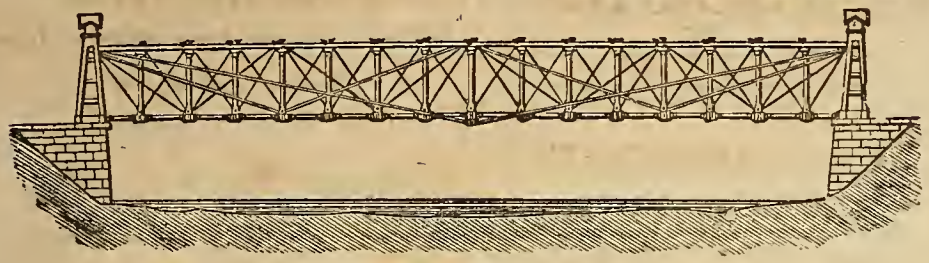
---

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, connecting with the North and West, leave Twenty-Sixth street Depot at 10 a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York Brooklyn Baggage checked from the residence points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 4, '63-1y. Letter Box, 1302. C. J. SCHULTZ, Pittsburgh, Pa.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS O

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible] Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27 '1y

---

WRIGLEYSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.

## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and to the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and trail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y t

---

## KNOX & SHAIN,

**Engineering and Telegraphic**

INSTRUMENT MAKERS

**PHILADELPHIA.**

---

## JOHN HOLLAND.

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES.

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN,

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES**

Orders executed promptly to any extent for their

## CELEBRATED WHEEL

**Either Single or Double Plate,**

**With or without Axles.**

## WHEELS FITTED

**To Hammered or Rolled Axles,**

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

Manufacturers, Importers & Dealers

—IN—

## RAILROAD, CAR,

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

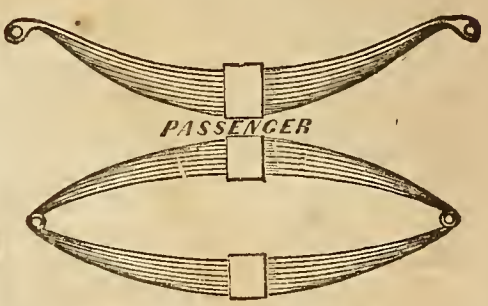
PERKIN LIVINGSTON & POST

---

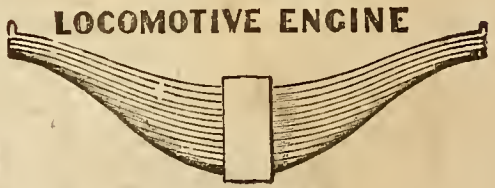
## RAILWAY SPRINGS.

**FREIGHT**






**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS.**

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

**W. M. F. REWSON,**

## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by a running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest Central West and Southwest. At Harper's Ferry with the Winchester road At Washington Junction with the Washington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH, *Master Transportation, Baltimor*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapolis & Cambridge City | 6 00 A. M. | 10 00 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M. |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M. |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 A. M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 5 P. M. |
| Hamilton Accommodation | 7 45 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M train for Toledo and Detroit. Also on the 6 00 P. M train for Chicago Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots, East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St Louis Cairo St. Joseph, Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville St, Louis and Cairo Depart. | Arrive. |
|---|---|
| Mail | 7:20 A. M 8:00 A. M. |
| St Louis, Cairo, & Louisville | 7,50 P. M 11:00 P. M. |
| Louisville, Special Train | 3:40 P. M. 1:00 P. M. |

On train on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 89 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad foot of Mill street C. E FOLLETT, General Ticket Agent.

J. D. Griswold General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T at 7:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:26 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Sept. 2 MOSELEY & CO.
BOSTON, MASS

## EDWIN J. HORNER,

SUCCESSOR TO

**McDANIEL & HORNER,**



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅛ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—4 to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS. CHAS WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!!

## FOUR PASSENGER TRAINS DAILY

**RAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P. M night.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.4 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points West

WM. BARNS SUPT

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, OCTOBER 26, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per anuum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direcon, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | *Depart.* | *Arrive.* |
|---|---|---|
| Morning Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P M. | 9:90 A. M. |
| Lightning Express | 7:01 P. M. | 4:35 P M. |
| Morrow Accommodation | 5:20 P M. | 8:00 A. M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Express Mail | 9:10 A. M. | 5:30 A. M. |
| Night Express | 10:50 P. M. | 7:30 P M. |

MARIETTA AND CINCINNATI,

| | | |
|---|---|---|
| Mail | 7:40 A. M. | 6:15 P. M. |
| Hillsboro Accommodation | 3:40 P. M. | 11:00 A. M. |
| Night Express | 7:45 P. M | 5:00 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Toledo and Detroit | 7:00 A. M. | 9:25 P. M. |
| Dayton and Sandusky | 7:30 A. M. | 5:50 P M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M. |
| Indianapolis & Cambridge City | 6:00 A M. | 10:05 P. M. |
| " " " | 4:00 P. M. | 12:45 P. M. |
| Toledo, Detroit & Huntsville | 5:00 P. M. | 12:50 P. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M |
| Richmond & Chicago | 6:00 P. M. | 12:25 P. M. |
| Hamilton Accommodation | | 7:55 A. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R.

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 6:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 4:00 P. M. | 12:25 P. M. |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Springfield & St. Jo. Express | 2:00 P. M. | 4:45 P. M. |
| St. Louis and Chicago Express | 5:15 P. M. | 1:30 A. M. |
| Lawrenceburg and Harrison Accommodation | 4:30 P M. | 8:30 A. M. |
| Harrison Accommodation | 9:25 A. M. | 2:35 P. M. |

OHIO AND MISSISSIPPI.

| | | |
|---|---|---|
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A. M. |
| Lonisville Special Train | 3:15 P. M, | 1:50 P. M. |
| Louisville, St. Louis and Cairo Express | 7:50 P. M. | 11:00 A. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4:00 P. M. | 7:45 A. M. |

COVINGTON AND LEXINGTON.

| | | |
|---|---|---|
| Morning Express | 6:00 A. M. | 10:12 A M. |
| Evening Express | 2:35 P. M. | 6:08 P. M. |

## RAILROAD ROUTE FROM CINCINNATI TO WASHINGTON VIA STEUBENVILLE.

Our readers have already been informed that, what is called the "Panhandle Road," being finished, and also the Suspension bridge, over the Ohio, the new route to the East, by Steubenville, the Panhandle, and the Pensylvania Central are now open to the public. Going to Washington city, I determined to avail myself of the opportunity to view the new structure. Leaving on the 7 p. m. train from Cincinnati, (which I may here say, is provided with the best of sleeping cars), Ohio was of course, passed in the darkness; but, as every mile of the road was familiar to me, this was, of course, unimportant. It is enough to say, that over the admirably managed route of the Little Miami road, everything went like clock work; each station was reached on time, and no jar, or detention, or difficulty of any kind occurred. Over the Ohio Steubenville road, we slept, and it must have been in excellent condition to permit that, without once disturbiug our slumber, or alarming our uerves. The dawn of morning found us on the banks of the Ohio approaching Steubenville. The few moments we were delayed brought us the broad light of day, and enabled us to see perfectly the noble bridge over the river. The train proceeded slowly over a heavy embankment, and enabled us to examine at leisure the structure before us. I am no judge of bridges; but a firmer one, than this, or, apparently a safer, I never saw. Exactly how high it is, I don't know; but the deep gulf below us, made it manifest, that steamboats could easily pass under, unless at extreme high water. In one respect, this bridge makes an epoch in the history of locomotion and civil engineering in this country. There had been a wire bridge at Wheeling; but it was insufficient. At the time this bridge was built, there was no bridge over the Ohio, or Mississippi, from Pittsburg to New Orleans; and this bridge is the first of a series of similar structures, by which the great arteries of movement between the North and South will be carried over the Ohio. This is one of the ways in which the war has proved beneficial. It became manifest, that great national movements of armies and transportation required a more easy and certain mode of passing great rivers than the common ferries. Hence Congress passed charters to construct bridges over the Ohio at Steubenville, Wheeling, Parkersburg, Cincinnati and Louisville. We have no doubt but charters will be given when needed, for bridges on any of the principal points on the Ohio, or the Mississippi.

The bridge at Steubenville is the first completed, but that at Cincinnati is nearly finished. This bridge is a really noble structure. It is solid, strong, and firm. In passing over it with a heavy train, I perceived not the least shaking. Its abutments are well built, and its supports strong and numerous. It is now demonstrated, that this kind of bridge can be safely made full 1,200 feet in length; and as this is much wider then there is any necessity of having the steamboat channel, it may be taking for granted that such a bridge may be built at any point on the Ohio, and at most points on the Mississippi, without being in the least injurious to steamboat navigation. The time is not distant, when bridges will span the Ohio, and the Mississippi, wherever they will be useful and convenient.

Sunrise found us in Virginia, in the "Panhandle." What is the Panhandle? This is a narrow strip of Virginia, which for some inconceivable reason was wedged in, between Ohio and Pensylvania; the Ohio river being the western boundary, and the Pennsylvania state line the eastern. I believe, it is no where more than fifteen miles wide, and is about forty miles long. Whatever benefit this strip of land may have been to Virginia, the fact of Virginia's jurisdiction over it, has been a great hindrance to railroad progress. Ten years, continued efforts were made to get a charter for a railroad across this little strip, so as to make a direct route from Pittsburg through Ohio; but in vain. It was probably against the interests of Wheeling, and Wheeling was in Virginia. Of course, all attempts to get a right of way over her district were met and defeated, by the Wheeling interest. As an ultimate resort, the Pittsburg managers bought the *right of way* of individuals, of course they could *make* the road over their own ground; but, could they *collect fare on it, and enforce the collection* without the aid of State laws? Here arose another difficulty; and this conflict was going on when the war commenced. In the meantime, the road was in a great measure made and finished. The war thus put an end to the difficulty. The country was under martial law, and Congress granted the right to build a bridge over the Ohio, and guaranteed the right of way. It remained only to make the bridge and finish the road. This has been done; and now no better road, or structure is to be found in the country.

From the bridge, we passed over the Panhandle, on a safe, solid, comfortable roadway to Pittsburg; where we arrived *on time* Let me say, this last fact is no unimportant point. It gives the traveller much satisfaction to know he is at each station on time. There is less danger of accidents, and less danger of his being detained long, for want of connections at Pittsburg. I came through on the great Pennsylvania road, which has few equals in the magnitude of its operations, or the profit of its business, in any country, and none in this. The receipts of the Pennsylvania road this year will exceed *fifteen millions of dollars.* The constant whirl of trains over it would be impossible, if it were not for

the *double track*, which gives this road a great advantage. Of its beautiful scenery and excellent management, I gave an account in one of the June numbers of the *Record*. It is enough to say, that no road in the country exceeds it, in the comforts of travellers, the variety of scenery, or the excellence of management. We arrived at Harrisburg, in precisely twenty-four hours from Cincinnati.—In going to Washington there is a delay here. The train goes on to Philadelphia without delay; but the train to Washington is delayed seven hours. There is no continous train to Washington, but the traveller goes by the *North Central* road which passes Harrisburg from Elmira, (N. Y.) Notwithstanding this, I arrived at Washington about half past 11 a. m., in time enough for my business, about 40 hours from Cincinnati. It would be well to run a Washington train from Harrisburg, for there are many passengers going to the capital by this route.

In conclusion, I can only say, that the Steubenville route is the most direct, the most perfectly managed, and certainly one of the most interesting and beautiful, of all the various ways to reach the Northern Atlantic.

E. D. M.

## IMPORTANT RAILROAD ENTERPRIZE.

J. W. Brown, General Ticket Agent of the Nashville & Northwestern and Nashville & Chattanooga Railroads, arrived here on Saturday, from the Convention of Ticket Agents in Chicago, and left for Nashville yesterday. He has concluded arrangements for coupon tickets from St. Louis to Chattanooga, via the O. & M. and Illinois Central Railroads to Cairo, there uniting with the Cincinnati and Johnsonville Packet Company, to Johnsonville, on the Tennessee river, where a close connection is made with his line of roads through Nashville to Chattanooga. On his arrival at Nashville, the rates for coupon tickets will be speedily established to Atlanta and other points in Georgia and the southwest.—The time from St. Louis to Nashville is reduced to thirty hours. Sixty first class locomotives, built by the Government since the spring of 1864, have been transferred to the companies represented by Mr. Brown, and they have also now five hundred freight cars on their roads, all in good condition.

St. Louis produce can be taken from Johnsonville into Georgia without changing cars, and cotton brought from Macon to St. Louis for $10 a bale.—*Cor. Cin. Gazette, Oct. 16th.*

Atlantic Telegraph.—F. W. Grote, in the *Am. Artisan*, insists that the only way to lay the cable with success, is to make it *hollow*; thereby gaining lightness, elasticity, and buoyancy, and avoiding the danger from sharp rocks.

The *Artisan* does not agree with its correspondent, quoting Maury and others on undercurrents, and thinks the cable liable to collapse or to be penetrated by water.

## LOUISVILLE AND NASHVILLE R. R. COMPANY.

REPORT FOR 1864 AND 1865.

The following statement exhibits the condition of this important link in the Southern chain of railroads:

COST, RESOURCES AND LIABILITIES.

| | | |
|---|---|---|
| Total cost of Main road and branches | | $9,665,563 97 |
| RESOURCES. | | |
| Due by U S. Gov't | $522,176 39 | |
| " Mail & Express, | 20,886 27 | |
| Bonds, Notes, &c. | 328,780 84 | |
| Tenn. State Bonds | 574,772 76 | |
| Real Estate, &c. | 33,294 13 | |
| Due by Railroads, &c. | 16,508 51 | |
| Shop Stocks | 557,941 87 | |
| U. S. 7 30 Treasury Notes | 580,648 19 | |
| Cash on hand | 278,142 15 | |
| | | 2,913,151 11 |
| | | $12,578,715 08 |
| LIABILITIES. | | |
| Capital Stock, Stock issued and Stock Liabilities | | $5,527,870 63 |
| Due Contractors and Bills payable | | 7,298 27 |
| Back Interest | | 17,509 27 |
| 2d Mortgage Bonds | | 14,500 00 |
| Dividends Nos. 3 and 4, uncalled for | | 162,216 09 |
| Dividend No. 5, due Aug. 1, 1865 | | 221,114 82 |
| Bills and Payrolls for June | | 243,490 24 |
| 1st Mortgage Bonds | | 2,072,000 00 |
| City Louisville Bonds loaned | | 1,225,000 00 |
| State Tennessee " " | | 560,500 00 |
| Profit and Loss | | 2,527,215 76 |
| | | $12,578,715.08 |

It consists of

MAIN STEM.

| | Miles. |
|---|---|
| Length of Main Line | 185.00 |
| Sidings | 17.16 |
| Total | 202.16 |

LEBANON BRANCH.

| | |
|---|---|
| Length of Main Line | 37.00 |
| Sidings | 1.49 |
| Total | 38.49 |

MEMPHIS BRANCH.

| | |
|---|---|
| Length of Main Line | 46.00 |
| Sidings | 2.67 |
| Total | 48.67 |
| Total Main Stem and branches | 268.00 |
| " Sidings | 21.32 |
| Grand total | 289.32 |
| Bardstown Branch | 18.00 |
| Total | 307.32 |

The Bardstown Branch has been added by purchase during the year.

The Company continued the operation of the 14 miles of the Memphis, Clarksville and Louisville Railroad. But the arrangement being temporary, the operation will be discontinued, unless new arrangements are made.

The extension of the Lebanon branch to Stanford, 36½ miles, will be completed early next year, and a further extension of 11 miles, to Crab Orchard, and within 12 or 15 miles of some good coal banks, has been located.

The work of construction, reconstruction and improvement has been determined to be continued during the present year, and the Superintendent recommends the expenditure of at least $300,000.

There was expended for construction and improvements last year $490,692 84. The amount still required is $767,610 87, and $99,778 96 for reconstruction,—total, $867,389 83.

| | |
|---|---|
| Operating expenses, main stem, | $1,317,433 64 |
| " Lebanon branch, | 90,303 13 |
| " Bardstown " | 12,927 11 |
| " Memphis " | 18,945 13 |
| Expenses reconstruction main stem and branches | 87,288 03 |
| Improvement account | 182,025 41 |
| Total operating expenses | $1,708,922 45 |
| Construction account | 308,667 43 |
| Expenses on M. C. & L. R.R. | 15,133 36 |
| | $2,032,723 24 |

DISTRIBUTION OF EARNINGS.—MAIN STEM.

| | |
|---|---|
| Passengers | $2,588,476 89 |
| Freights | 1,250,050 18 |
| Mail | 36,825 00 |
| Express | 110,802 05 |
| | 3,986,154 12 |

LEBANON BRANCH.

| | |
|---|---|
| Passengers | 51,721 23 |
| Freights | 29,088 63 |
| Express | 6,672 82 |
| | 87,482 68 |

MEMPHIS BRANCH.

| | |
|---|---|
| Passengers | 56,566 89 |
| Freights | 28,102 41 |
| Express | 3,409 02 |
| | 88,078 32 |

BARDSTOWN BRANCH.

| | |
|---|---|
| Passengers | 7,010 03 |
| Freights | 4,101 20 |
| Mail | 675 00 |
| Express | 944 60 |
| | 12,730 83 |
| U. S. Government and other sources | 140,094 10 |
| Total earnings | $4,314,540 05 |
| Total expenses | 2,142,024 63 |
| Net earnings, 50 4-10 per cent. | $2,172,515 42 |

The road has performed an important part in the history of the rebellion, having been the supplying line in the grand operations of Grant, Sherman and Thomas, and has suffered proportionately as is shown by the following

RECONSTRUCTION ACCOUNT.

Under this head the Superintendent enumerates some twenty-three attacks upon the

road by guerrillas, &c., during the year, besides numerous attempts to throw off trains, robbery and maltreatment of employes and passengers, and appends the following table of damages.

| | |
|---|---|
| The amount of money expended during the year in restoring the Company's property destroyed during the war is..... | $87,288 03 |
| Amount expended prior to July 1, 1864, for the same purpose..... | 501,305 57 |
| Total to July 1, 1865..... | $588,593 60 |
| Amount remaining to be expended to repair all damage sustained during war..... | 99,778 96 |
| Total amount of damage ..... | $688,372 56 |

The road sustained great damage from a freshet of unexampled severity on May 19; up to July 1st, $10,801 15 had been expended in repairs from this cause.

The stockholders, in October, 1861, set apart a sinking fund of $400,000 per annum from the net earnings, to pay, 1st, interest on the debt, next, for completion of the road, and last, to payment of bonded debt, and it has been applied as follows: 1862, interest and floating debt; 1863, interest and reconstruction; 1864 and 1865, interest, redemption of mortgage debt, and completing road.

Since the establishment of the sinking fund the aggregate earnings to June 30, 1865, applied to construction has been $750,763 93. The stock and stock liabilities to same date, $5,527,870 63. The aggregate bonded debt, exclusive of Tennessee State Aid Bonds, provided for as above, $3,297,000—total, $8,824,870 63.

The aggregate cost of the road to June 30, 1865, is $9,665,563 97. The difference between it and the stock and bonded debt, amounting to $840,693 34, has been paid out of earnings, as have dividends of 24¼ per cent, with a surplus for sinking fund. The 10¼ per cent. stock dividend has been added to the stock liabilities. The interest on the capital invested in the road has been capitalized, and forms part of the stock liability of the Company. The dividends are 10¼ per cent. in stock, and 14 per cent. in cash. The surplus on hand, and the condition of the road show the ability of the Company to pay interest and principal of the debt, and make a first-class road, paying reasonable cash dividends meantime. The suppression of the rebellion will reduce the business of the road and its profits for a time, but under the new order of things its peculiar advantages of location will eventually render it one of the best paying roads in the country.

The stockholders passed a vote of thanks to Hon. James Guthrie, and requested him to continue in the presidency for the ensuing year.

The following gentlemen were elected Directors,—James Guthrie, H. D. Newcomb, J. B. Wilder, R. A. Robinson, W. B. Hamilton, W. Hiram Smith, and Russell Houston of Nashville.

## NORTH PACIFIC RAILROAD.

By a special telegram from Washington to the *Gazette*, we learn that Colonel Rowland, conductor of the Northern Pacific Railroad, is here urging upon the Government the great international importance of that interest. He represents that he has made application to the Secretary of the Interior for the withdrawal of the surrounding land along the line of the proposed road, in Wisconsin, Minnesota, Washington Territory and Oregon. Hon. E. Watkins, M. P., of England, President, and Mr. Rogers, Managing Director of the Grand Trunk Railroad of Canada, met last evening E. S. Toby and H. A. Hall, of Boston; Judge Rice, President of the Kennebec and Portland Railroads; H. A. Wallis, of New York, and Colonel Rowland, for the purpose of so uniting British and American interests as to secure the immediate prosecution of the work."

This is the true policy of the Northern Pacific Railroad. The interests of this route are so clearly blended with the Canadian and New England system, that it would be remarkably strange if they could not see it. In importance, we deem the Northern route second to none. It runs through and will develop one of the finest countries the sun ever shone upon, and that will, as soon as the pathway of the iron horse is made clear, teem with a luxuriant agricultural production, and contribute its full share to the mineral riches of our country. The gradients are lower than on the Central route, and there will be less obstructions from the snows of winter. It will have an abundant trade of its own, and will in no wise be a rival of the other roads. Let it be pushed forward with the rapidity that it deserves, and its construction will be abundantly rewarded.

At the annual election of the Erie Railway Company yesterday, the following ticket was unanimously elected by a vote of $18,000,000 of stock out of $24,000,000: Samuel Marsh, Daniel Drew, John Arnot, William B. Skidmore, Cornelius Vanderbilt, Robert H. Berdell, Dudley S. Gregory, Ralph Mead, Ambrose S Murray, Williams Evans, J. C. Bancroft Davis, H L. Pierson, D. A. Cushman, Alexander S. Diven, Thomas W. Gale, Isaac N. Philps, J. F. D. Lanier. The gross earnings of the road in September were $170,000 less than in 1864, which yielded net $1,301,005. The English capitalists so deeply involved in the Atlantic and Great Western road, have, it is understood made demands upon the Erie management which that company will not concede, though threatened with a new road from Salamanca to New York, and a total loss of the Great Western traffic. As the latter can command an abundance of money, another outlet to the seaboards may yet be had.

| | |
|---|---|
| The earnings of the Atlantic and Great Western Railway for the month of Sept.. 1865, were..... | $677,625 00 |
| Corresponding month of previous year..... | 446,044 00 |
| Increase ..... | $231,581 00 |

## JOURNAL OF RAILROAD LAW.

### DELAY IN DELIVERY OF FREIGHT—LIEN OF COMMON CARRIERS.

In the case of Crommelieu *vs.* N. Y. and New Haven Railroad Company in the New York Superior Court, the plaintiff, who was a stone cutter, was in the habit of having marble brought over the Harlem Railroad from South Dover to Forty-second street, in the city of New York. The defendants had established a rule or regulation, that in addition to the freight, one dollar per day would be charged for the use of each car, after the marble had remained forty-eight hours at the depot. The plaintiff had notice of the regulation. In October 1860, three car loads were brought over the road for the plaintiff. On the arrival of the three cars, the plaintiff was notified thereof, and also that one dollar per day for each car, would be charged, after forty-eight hours. The cars with such marble upon them, remained in the street in front of the depot for several days. On the 19th of October plaintiff paid the freight, but refused to pay the one dollar extra per day for the detention of the cars. The defendants refused to deliver the marble without payment of the extra charge, and the plaintiff brought this action to recover possession of the property.

The defendants proved by Baker, their freight agent, that in August or September, previous to the shipment of the marble, he was inquired of by the plaintiff respecting cars; that Baker replied that they were very short of cars. The plaintiff said he expected in a week or two some more marble down.—Baker said they would do the best they could to supply the cars; that they had been short of cars all summer; so short that he had received notice from the president that all persons having freight upon the road must take it away within forty-eight hours, or he must charge them one dollar per day for the use of each car. This was three or four weeks before the arrival of the marble. The plaintiff objected to the arrangement and said that he would break it up if he could.

The Judge submitted to the Jury the question whether the plaintiff had notice as to what the charge of the company would be.—He was requested by the plaintiff to charge that the "defendants had no lien for the detention." He refused so to charge and the plaintiff excepted.

The Jury returned a verdict for the defendants.

The plaintiff appealed to the General Term, and the opinion of the court was written by

ROBERTSON, J.—The defendants claim to have had lien on the plaintiff's marble, for a per diem compensation for allowing it to remain upon the cars by which it was brought, for several days in a public street. There was no evidence adduced of any right on their part to such permanent occupation of the highway; the obstruction therefore, of it by such cars and marble was a public nuisance. So far as any safety of the merchandize was concerned, its bulk would probably have rendered it equally safe, if taken off from the cars and laid on the pavement. Leaving articles in an open vehicle exposed on a highway, is not the kind of storage for which a lien can be acquired. Even the right of the defendants to make contracts for continuous storage of merchandise, although transported by them previously, under their charter, may be doubted. Upon any ground I think the claim for such lien is untenable. The judgment must be reversed, and a new trial ordered

to abide the event. An opinion was also written by

MONELL, J.—The only question in this case is, whether the regulation of the defendants, to make an extra charge for the detention of their cars, known to, and as I think the evidence establishes, acquiesced in and assented to, by the plaintiff, constituted a lien upon the marble, which would authorize the defendants in retaining it, until the charge was paid, I think the transaction, as testified by Baker, constituted it in effect an implied, if not an express contract, that the defendants would charge, and the plaintiff would pay, the extra charge, with notice of the regulation, he shipped the marble and there is enough to raise an implied assumpsit, upon which I have no doubt the defendants could recover in an action for that purpose.

A lien is defined to be the right which one person in certain cases possesses, of detaining property placed in his possession belonging to another, until some demand which the former has is satisfied, (Whitaker on Liens, p. 2). They are of two kinds particular or special, and general. A special lien is the right to retain the property of another on account of labor bestowed or money expended on the same property, and is established by the common law and by express agreement. A general lien is the right to detain property for a general balance due from the owner and arises by the usage of trade, the usage of the parties or by express contract. (Ib.) The lien of a common carrier is a special, and not a general lien. Hence, in this case, if any lien exists in favor of the Railroad Company, which would authorize them to detain the plaintiff's marble, until the charge for detaining the cars was paid, it must be established either by express contract or by the common law. It is not pretended that there was any agreement that the defendants should have a lien on the marble until the extra charge was paid; and I have been unable to discover that it is sanctioned by the common law.

The lien at common law exists only in respect of freight actually earned by the carrier of the goods, at the stipulated place of destination. (Angell on Carriers, § 383.) "And therefore," says this elementary writer, "covenants for demurrage, or for providing a full cargo, cannot be enforced by the specific remedy of lien, even though the charter party contain such penal clause. The remedy for such matters rests entirely in covenant, and the more penal clause will not extend the right of lien."

The question arose in Boily *vs.* Gladstone, 3 M. & Sel. R., 205. The ship was chartered for a voyage out and home, and by the terms of the charter party the merchant covenanted to pay for the homeward cargo at certain rates per ton, on delivery at Liverpool; to load with full cargo, and pay demurrage. He bound the goods to the performance of his covenant.

The court of King's Bench held, that the carrier could not detain the goods either for the freight of such as was put on board and afterwards reclaimed by compulsion, nor for the dead freight, nor for demurrage. Ld. Ellenborough said that covenants for providing a full cargo, or for demurrage give no lien. In this case it was claimed that the charter party gave the lien for demurrage in express terms, as it was stipulated that the goods should be bound for the due performance of the covenants; but Le Blanc, J., says: "It is impossible that this obligatory clause can be construed to mean, that the owners of the ship would have a lien on the goods brought home, for every breach of covenant in the charter party; as for instance the not loading a full cargo and for demurrage. The remedy for such matters rests entirely in covenant." It was not denied that such a lien might be created by express contract, but it was held that the words in the charter party expressed no such agreement.

The only other case I have found bearing directly on the question is, Lambert *vs.* Robinson, (1 Exp. R., 119,) which was tried for the conversion of goods. The goods had been taken upon the road. On their arrival at the Inn, the plaintiff (owner) was there to receive them. The carriage came to three shillings and sixpence, which the plaintiff tendered.—The tender was refused unless the further sum of two pence per parcel was paid for "booking." This was refused, as the goods had not been brought into the warehouse, but delivered from the wagon. Eyre, Ch. J., said: There was no lien given by law in this case; but if there was the charges was not lawful, and a lien exists only for lawful charges.

The elementary books and cases to which I have referred would seem to settle the law, that a lien exists for freight only after it has been earned, unless there be an express contract creating the lien, in clear and unequivocal terms. The defendants in this case, claimed to detain the marble until the plaintiff paid the extra charge of one dollar per car. The freight had been tendered and paid. At most there was an implied agreement only, that the plaintiff's would pay the extra charge. He did not by an express stipulation, bind the goods, or create a lien upon them, until the charge was paid. The remedy, if any, rested entirely in the implied assumpsit; there was no right of lien. Nor can defendants be regarded as warehouse keepers, and entitled to a lien for storage. They did not in any sense store the plaintiff's marble. It was left upon the cars standing upon the railway track in the public highway, upon its arrival at the place of destination and notice to the plaintiff, and reasonable time given to accept and take, by the consignee, the defendants had discharged their whole duty, and could not be held responsible for any loss or damage; and hence no right of lien could arise for housing, unless the defendants were warehouse men as well as carriers, which they were not in this case.

Under the view of the law of lien which I have taken, it was error to refuse to charge as requested by the plaintiff.

The judgment must be reversed and a new trial granted with costs to abide the event.—*R. R. Journal.*

---

That part of the Northwestern Railroal lying between the Pennsylvania Central east of Blairsville and Freeport, on the Alleghany river, has been completed and is now in use. At Kiskimmetas Junction this line strikes the Alleghany Valley Railroad running to Kittanning. This branch having been built by the Pennsylvania Railroad, will be worked by that company as an avenue for the coal, iron, salt and petroleum trade between the Alleghany valley and Philadelphia. Large shipments of oil, salt and coal are daily passing eastward and travel rapidly increasing. As an evidence of the importance of this avenue, it will be observed that the Valley Road has increased at least one hundred per cent. in travel from Freeport, since the completion of this branch. The extension of the road from Freeport to Alleghany city is being pushed forward rapidly, and it is expected that cars will be running to Natrona by the middle of December.

## THE AIR-LINE RAILROAD.

We are unable to see the force of the arguments advanced in the subjoined article from *The Stockholder*, nor how the proposed *saving* of 200 miles between the West and Liverpool is to be accomplished by rail communication instead of the usual water transit.

We believe we do a public service when we refer the attention of the English capitalists now among us to the Air-Line Railroad between Boston and New York. It is one of the great enterprises of the day, and a work that will be accomplished, sooner or later, to answer the importunate demands of communication between the East and the West. Boston must maintain her position as the second great commercial city of America, and the only way she can do this is by seeking and completing the shortest and most feasible route for travel and freight between the East, New York and the great West. The Air-Line was projected in 1846 or 1847, and the moment the enterprise was understood by the public, it found warm and efficient advocates among the capitalists of New England. The great point to be remembered is this: it is twenty-five miles and one hour nearer New York city and the Erie Railroad at Fishkill on the Hudson river, than any other route. This one consideration alone is sufficient to demand the completion of the road in the shortest possible time. When completed it cannot fail to be one of the best railroad investments in New England. It is already completed from Brookline to Woonsocket, in Rhode Island; something like six miles more of the road are graded beyond Woonsocket, and but seventeen miles need be completed beyond that place to cut the Norwich and Worcester road at Daysville in Connecticut, and this would give steamboat communication with New York by the way of New London. Then we would have only to build from Daysville to New Haven by the way of Willimantic in Connecticut, and, by making common interest with the New Haven road, the direct Air-Line route would be completed to New York. Then building from New Haven to Fishkill on the Hudson, by the way of Howleysville, passing lengthwise through the valleys skirting the Housatonic river, and running a little north of west, we connect with the New York and Erie at Newburgh, there touching the New York and Erie much nearer than at New York city. From Newburgh, through the New York and Erie to Salamanca in Western New York, and through the Atlantic and Great Western, and the Ohio and Mississippi to St. Louis, we have the six foot track, so from St. Louis to Newburgh there would be no necessity of changing cars for travelers nor of breaking bulk in freight. This line passes through the most fertile, enterprising, populous, and wealthy portion of the continent. The Air-Line enterprise, to bring the fruition of this line of commerce to Boston, or the share to which New England is naturally entitled, must be completed by Boston capitalists. We have only to lay the third rail on the New England end of the line, and make a car-ferry across the Hudson at Fishkill, when cars laden at St. Louis with the grains of the great West may come through to the deep waters in the harbor of Boston, and unload themselves into the holds of vessels bound for Liverpool and the continent of Europe. At Boston they would be two hundred miles nearer Liverpool than at New York, and all men knowing the necessities of speed and time in this commercial age know that this is a commanding advantage in favor of this route.

Not only this: by this deep water connection on the east side of Boston, we cut the Eastern, the Boston and Maine, the Boston and Lowell, and the Fitchburg roads, thus greatly facilitating communication with the State of Maine and the provinces; and also with the Grand Trunk Railroad, terminating at Portland. We hope the capitalists of Boston and the English capitalists now among us will see to it that this work, so much demanded, and promising so well as an investment, is expeditiously advanced.

## THE GREAT WEST.

The *Evening Post*, in the course of a generally excellent article on Emigration to the South, says:

"Fortunately for the Southern States, as Mr. DeBow remarks, and as we have frequently shown, the period has arrived in the settlement of our country when emigration is compelled by natural obstacles to turn back from further advance westward. Our Western settlements have reached the verge of the great interior desert; they already trench upon sterile soil; they now occupy lands so distant from a market, that the farmer's products become next to valueless, through the expensiveness of transportation."

We assure the *Post* that this statement is essentially mistaken and unjust.

True, there is less fertile land unoccupied in the West to day than there was sixty years ago; yet there are still immense bodies of it—hundreds of millions of acres, as inviting as any whereon the sun ever shone. The Federal Government has still many millions of acres that it concedes to settlers on the payment of *ten cents per acre* ($10 per quarter section) to pay the cost of survey and sale only. Then the States have large areas granted by Congress in aid of Agricultural and Mechanical Colleges, which can be bought in fee simple for $1 per acre. Then there have been millions of acres more granted in aid of Railroads and other internal improvements, which are held higher; but which are really cheaper than those lower priced. Even those of the Illinois Central, being immensely enhanced in value by the construction of that noble work, are really cheaper than Ohio lands would have been fifty years ago if absolutely given away. And then there are thousands on thousands of individual holders who, pressed by debt and taxation, would gladly "unload" on almost any terms. All these are many miles this side of the sterile desert or "Plains;" while there is some very good land along the eastern base of the Rocky Mountains beyond "the Plains."

Nor is it true that the new lands now for sale are "so distant from a market." The Genesee Valley in our State was in good part paid for with wheat grown thereon at an average of not more than fifty cents per bushel. That Valley was practically farther from New England—much farther from markets—fifty or sixty years ago than Minnesota or Kansas now is, and reached with far greater difficulty. The farmers of Minnesota are now selling their wheat quick at 75 cents to $1 10, cash; and they have piles of it. And the Far West finds great markets for its produce rapidly expanding in the mines of Colorado, Montana and Idaho. Give us the Pacific Railroad to Denver, and they will send up ten dollars' worth where they now do one, and receive their pay in gold. We heartily approve all efforts to fill the South with new industrial life; but the West is still inviting, and proffers happy homes to many millions more of honest workers. The West never presented greater attractions to immigrants than she does to-day.—*Tribune.*

(Correspondence Cincinnati Commercial.

## SOUTHERN SHORT-LINE RAILROAD.

Deeply interested, as I am, in whatever concerns the permanent commercial prosperity of our great and growing metropolis, I desire briefly to urge upon your numerous readers the great importance of the proposed railroad route indicated by the above title.

The Paris, Irvine and East Tennessee Railroad Company was incorporated last winter by the Legislature of Kentucky—the act of incorporation being approved February 15, 1865. The stockholders met at Erie, Pennsylvania, on the first Monday in May last, and elected officers of the Company, as follows: P. G. Finn, President; Benjamin Grant, Secretary; H. S. Stearns, Treasurer. The Board of Directors is constituted as follows: J. Towner, Benjamin Grant, P. G. Finn, H. S. Stearns, W. B. Dodge, all of Erie, Pennsylvania, and Colonel S. M. Barnes, of Irvine, and Hon. James H. Embry, of Richmond, Kentucky. The office of the Company is, for the present, at Erie, Pennsylvania.

The charter is very liberal and comprehensive. The capital stock is two millions, in shares of one hundred dollars each. Considerable stock is already taken by railroad and oil operators in Pennsylvania. I understand that the company is now negotiating with European capitalists, engaged in an emigration scheme, who may take the entire stock of the road; otherwise, I am informed that subscription books will soon be opened in this city, and an opportunity be offered for our citizens to make such investments as will make this, in reality, a Cincinnati enterprise. When the great feasibility of the proposed route is fairly considered, and the vital bearing the road will have upon the commercial interests of this city comes to be fully appreciated, I am confident that our people will take hold of the work with the energy that insures speedy success.

The contemplated route of the Paris, Irvine and East Tennessee Railroad, whether considered with reference to its directness, its grades, or the agricultural and mineral resources of the country through which it is to pass, is undoubtedly superior to any other that is, or that can be, proposed. Commencing at Paris, in Bourbon county, Kentucky, (with which we are already in communication by rail), the route proceeds across the Red river, passes along the Kentucky river, through Irvine, in Estell county, to Proctor, in Ousley county, thence to Manchester, in Clay county, thence to Barbourville, in Knox county, thence to Cumberland Ford, and out through Cumberland Gap. The distance is about 160 miles. As can be seen on the map, this constitutes pretty nearly an air line, and I am assured that there are no heavy grades or abrupt curves throughout the entire distance. The route pierces and opens up the most valuable coal, iron, salt and lumber regions found in any State of the Union. Valuable iron mines and furnaces, and wells yielding the highest known per centum of salt lie upon and contiguous to the road. It also passes over what is believed to be the great oil belt of Kentucky, where capital and enterprise are now engaged in making developments with the most flattering prospects of success. The charter empowers the company to build lateral roads, connecting with the main line, whereby vast stores of mineral wealth may be tapped and made available.

In 1863, President Lincoln, in the exercise of his usual sterling sense and excellent judgment, recommended to Congress the building of a railroad to connect Danville, Kentucky, with Knoxville, Tennessee, to be used for military purposes, but which he also probably fully foresaw must be very useful and necessary, as a great commercial thoroughfare, in time of peace. Congress adjourned without taking action on the subject. The road under contemplation is substantially the same as that proposed by the President, and is really better calculated to meet the same demand, and serve the same purpose. The war is over, but the star of empire never sets; the necessities of Trade are greater than ever, and peaceful Commerce demands what rampant War could forego.

The Paris, Irvine and East Tennessee Railroad must constitute an indispensable link in the great continental highway, running in a nearly *straight* line from Chicago to Charleston, linking lake and sea. The growing West, and the regenerated South, will crave this thoroughfare, and *it must go through!* Cincinnati will be the great central and distributing point on the line, and no one can be so blind as not to see how directly and vitally this grand enterprise is connected with our present and future prosperity.

BUCKEYE.

## THE PACIFIC RAILROAD.

We hear with great satisfaction that both forks or prongs of the Eastern division of this great work are being resolutely pushed forward. The Southern (Kansas) fork, connecting with the Missouri Pacific at the mouth of Kansas river, is now in full operation to Lawrence, and will soon open to Topeka, or beyond, and is to be pushed on to Fort Riley next season. We hear that its completion to this point will save the Government one million of dollars per annum in the transportation of provisions and munitions to our forts and forces on the plains; judge, then, what must be the saving when the whole is completed.

New blood has lately been infused into this enterprise by an association of capitalists connected with Eastern roads looking for increased traffic therefrom; $1,000,000 was put in by them as a first installment. We hope soon to hear that the obstacles which have hitherto prevented the payment to this enterprise of the subsidy stipulated by act of Congress have been happily removed, and that the work is henceforth to be pushed forward with ample means and resolute energy. Let us once get our Currency back to rock-bottom, and we shall insist on the construction thenceforth of at least one mile per day of the main track of the Pacific Road till it is finished. For that road is destined to develop natural wealth hitherto hidden in the earth, stimulate the industry and increase the wealth of this country, beyond all precedent. We look for an annual product from our mines of gold and silver of five hundred millions of dollars per annum within the next twenty years. And the most potent agency whereby these magnificent results are to be secured is the Pacific Railroad, which we pray may be pushed forward with all possible vigor.—*Tribune.*

The Superintendent of United States Military Railroads recently sold at auction, at Manchester, Va., 25 locomotives and 160 passenger cars. They were purchased principally by the Southern railroad companies, and brought $417,000 in cash, or about two-thirds of the original cost. Forty or fifty locomotives and 500 or 600 cars are to be sold on the 17th inst., at Alexandria, Va.

## FROM ST. PAUL TO ST. LOUIS.

From St. Paul to Minneapolis, due south, a road is making to Waterloo, near Cedar Falls, about 175 miles; and from Waterloo to Cedar Rapids, about 60 miles; a road is projecting from Cedar Rapids to Ottumwa, about 75 miles; and from Ottumwa to Missouri State line is 28 miles; and from the State line to Macon city is 68 miles; and the road is built from Macon city to St. Louis, 170—making a total distance of, say 576 or 600 miles by land from St. Paul, against 800 by river, 600 by the Illinois Central and river.

Of this line, some 50 miles are bui't out from St. Paul, opening to Faribault shortly, and 20 miles northward from Waterloo, and it is progressing. From Cedar Falls to Cedar Rapids, it is also progressing, and the spirit may be judged of in this, that a bonus of $110,000 was given by one county to help this connection. From Cedar Rapids to Ottumwa and the State line is the subject of a Convention to be held at Cedar Rapids the 27th inst., The funds are furnished in State bonds, which are negotiating.

The importance of this line to both the North and to St Louis, can not be exaggerated in the highest terms to speak of it. It affords the North a certain daily communication to avail of in passage and freight to open water communication and a market, which can not be reached by them now nearly half the year; it guarantees them against low water, (two years' crops are yet lying on the Minnesota river from low water there), and it affords a desirable connection to them for their Lake Superior connections, whither they are now extending with a railroad, and the distance about 165 miles, bringing its minerals to their great water-power, and, also, to their extension of railroad on the Mississippi above St. Anthony, on which they are now running some forty miles. To St. Louis it brings back the supply of the vast North with its wants, as well as receiving its products, and the added benefit of connections already made east and west on this line.

Another evidence of this feeling to open St. Louis communication is in the road from Dubuque to Cedar Rapids, and another evidence in the extension that is making from Savannah on the east side of the Mississippi river down to Warsaw, opposite Keokuk. This extension is finished to Fulton—graded to Albany; avails of the Rock Island road to cross Rock river, and is pushing along quietly and steadily—already a competitor with Chicago in the upper river trade, which the Northwestern steamer line butts against.—*Stockholder.*

---

New Railroad in Kentucky.—We understand that the building of a railroad between Henderson and Nashville will be carried through with energy. The work has already been commenced, and it is said to be in the hands of capitalists who are determined to give to Kentucky the great advantages derived from a thorough line of railroads. This railroad will go into and through the richest coal, petroleum, and tobacco sections of the State, and, when completed, will bring to our city a rich trade which has heretofore been neglected. Let the road be finished at once, and we may then look for a great increase in the trade and business of the State. Without the means of ready and cheap transportation, the mineral advantages of our State are obscured, as well as its agricultural and other interests. With a thorough system of railroads centering at this place, or connecting with our lines of steamers, Louisville will be the great mart of the Southwest.—*Louisville Journal.*

## RAILROAD CONSOLIDATIONS.

An impression is growing that an attempt will be made to consolidate the New York Central, Harlem and Hudson River roads into one corporation the coming Winter. Although monopolies are the order of the day, we have no reason to fear that such an act will be accomplished by legislation. The people will not permit the New-Jersey system to be inaugurated in this State, viz: the absolute rule of a huge corporation, seeking to make money by any process.

The consolidation of the Harlem and Hudson River roads was not made by legal enactment last Winter, but it was virtually accomplished by placing both roads under the same management. The unfortunate minority of stockholders in the Hudson River road who may have waited for a long time the realization of its prospective value and consequent remuneration for years of loss of interest on dividends, have discovered that the Harlem is laid upon its back to carry. The stockholders of the New-York Central may find themselves in a similar predicament should the same influences which are understood to predominate in the counsels of that road at present, receive a new and stronger lease of power. It behooves them to look about and see that they are not sandwiched between the Hudson and Harlem to lift the latter to its recent fancy value under a manipulation similar to that which burned a hole in the pockets of many gentlemen who could not see how it would be worth 180 even if carried in the breeches pocket of a single shrewd operator. If the Central shareholders would avoid the fate of the Hudson, let them look to their next election and secure a board of directors not subject to a will that may eventually give their stock a filtering process either by improper influence upon legislation or by tacit agreement. If they submit quietly to the management of operators who may own but a small portion of their stock and twice or three times as much in the Harlem and Hudson they may find themselves shorn without much chance for relief.—*Tribune.*

## RAILWAY SAFETY.

A writer in the New Bedford *Standard* says: It appears by the annual returns of the railroads of Massachusetts for the year 1864, that of the millions of passengers transported, not one was killed in the cars. Seeing this statement in your paper, I was led to examine the annual returns of the New Bedford and Taunton Railroad, and the following is the result: From the commencement of the year 1846 to the close of the year 1864, 2,192,024 passengers were conveyed in the cars, and while in the cars not one was killed nor one seriously injured. Three serious accidents, one of which was mortal, happened to persons endeavoring to enter or leave the cars when in motion One of these casualties which befel one not a passenger, was judicially investigated and the road was acquitted of all fault in the case. The whole number of times when casualties occurred to one or more persons at a time, during the whole period, is 14. This includes injuries to passengers, employes, persons walking on the track, playing on the track, casting themselves on it, and all other casualties. I find but one instance of collision of trains. It would seem from this statement that passengers who commit themselves to the care of the officers of the New Bedford and Taunton Railroad, if they observe the rules and regulations of the company, may ride with much tranquility even in this day of railroad slaughter.

## THE USE OF WATER AS FUEL.

An interesting discussion was held on the 16th inst., at a meeting of the New York Association for the Advancement of Science and Art, at the Cooper Institute, on the use of water as a fuel. Dr. Wm. E. Hagan, of Troy, N. Y., has recently been conducting a series of experiments to determine whether steam could not be advantageously used as an aid to combustion. The subject was brought before the Association at their last monthly meeting, and a committee appointed to test the merits of Dr. Hagan's plan. The committee reported last night through the chairman, that although they had been testing the matter by experiment for a week, that inasmuch as the apparatus used by them was not adapted to determine with extreme accuracy the exact difference made in the combustion of the coal by the introduction of the steam, they had not prepared a formal report of the results obtained. The chairman of the committee, Dr. Leonard D. Gale, however, gave a very interesting informal account of the experiments made and the results thus far obtained. The first object which the committee sought to obtain being the value of the discovery for domestic purposes, they had conducted their first experiments with an apparatus much resembling a common cooking stove, in fact, differing from one only in having attached to it in front a thick piece of cast iron with a cavity in the centre very much like a common "water back" to a stove. On the top of the apparatus were four kettle holes, in each of which a kettle of water was placed, while another vessel of water was placed in the oven behind. The amount of heat produced during the various experiments was determined by the weight of water evaporated from the vessels. The experiments were conducted for three days by burning coal in the apparatus in the ordinary manner, the amount of coal placed in the stove being carefully weighed each day, as also the amount of ashes or residuum left, and the amount of water evaporated. For the other four days a small stream of water was admitted into the central cavity of the hollow iron front above described, which being converted by the heat of the fire into steam, passes through a series of small openings into the center of the burning coal. As in the other experiments, the amount of coal consumed and of water evaporated was carefully determined and noted. The net results of the seven days' experiments showed that while one pound of coal burned in the ordinary way in the apparatus would evaporate on an average 3 82 100 pounds of water, the same coal burned in connection with the steam would evaporate 5 49-100 pounds of water per pound of coal, the proportion being as 50 to 75. In other words, that the use of the stream of steam, in connection with the coal, increased the available heat obtained from the latter about 50 per cent. We give the figures in gross, although Dr. Gale gave them in detail at considerable length. As in these experiments, a great part of the heat was necessarily lost by radiation from the exposed surface of the stove, it was impossible to determine accurately the exact amount of increase of heat caused by the presence of the steam, but enough was shown to demonstrate that the subject is well worthy the attention of economists. Dr. Hagan stated that a locomotive was now running on the New York Central Railroad, in which, by the use of his system, 30 pounds of water were converted into steam by an average consumption of one pound of coal. This Company are now applying the

principle to six more of their locomotives, and are about to construct 20 others, built expressly to include this principle.

After some discussion the further consideration of the subject was again referred to the committee, who were instructed to examine it thoroughly and report at some future meeting.

TOLEDO AND SOUTHWESTERN TRUNK RAIDWAY.—We learn (says the *Toledo Blade* of October 13), that the new railway organization, of which mention was made a few days ago, is attracting considerable attention at the west. The line was stated, as our readers will remember, to be from Goshen, Indiana, a station on the Michigan Southern Road, direct to Springfield, Illinois. It is proposed to call the new organization the Toledo and South western Trunk Railway Co. The *Chicago Tribune*, speaking of the route designed to be occupied by the new company, says the people of nine counties in Illinois, and six in Indiana, are determined to keep up with the improvements of the age, by the construction of a railway from Toledo, Ohio, to Springfield, Illinois. In traversing that fine agricultural and stock raising country, this road will strike the county seat of every county but one through which it passes. It will connect with the Southern Michigan R. R, which is one of the links to connect in a direct line northeastwardly with railway lines for a distance of 85 miles.

From Springfield, Illinois, there is a road now in operation to Jefferson City, Missouri, with a determination on the part of the people in that section of the country to continue the road so as to connect with the Eastern Texas Railroad, at Sherman, on Red river, thus connecting Austin, the capital of Texas, with Montreal, Canada, in almost a direct line; and when thus finished, will be over 3,000 miles long, the most direct and longest line of rail road in the world. This enterprise is a very important one for the counties through which it runs, as there is no railroad running in the same direction nearer, on each side of the line of this road, than from thirty to seventy miles. The country will be of easy grade, and good timber for bridges and cross ties plentiful.

The officers of this road are well known by the people in the several counties in which they reside, for honesty and business qualifications, and in consequence of which the stock solicitors have met with good success in procuring stock.

FLINT AND PERE MARQUETTE RAILROAD—The principal opening to this important portion of our State, except that afforded by the navigable waters, is the Flint and Pere Marquette Railroad, which, connecting with the Flint and Holly and the Detroit and Milwaukee Railroad, forms a continuous line between East Saginaw and this city. An idea of the extent of traffic on this line may be formed from the following statement, which we derived from a responsible officer of the company, the figures being derived from the books of the Flint and Pere Marquette Company, and include a period of eight months, closing the 31st of August respectively:

| | No. pass'rs. | Total earn'gs. |
|---|---|---|
| Eight months, 1863..... | 39,643 | $38,330 65 |
| Eight months, 1864.. ..... | 56,718 | 69,053 17 |
| Eight months, 1 65..... | 65,803 | 100,630 21 |

The above table shows a most gratifying increase of business. No railroad in the State is in better repair, nor one that is better managed. Its extension to Lake Michigan is an event to which the citizens of the northern part of the State are looking forward with great anticipation.—*Detroit Advertiser.*

## RAILROAD NEWS.

The shares of the McGregor Western road are now dealt in at the Stock Exchange. The line runs west from Prairie du Chien, and is under a favorable permanent (or thirteen years) traffic arrangement with the Milwaukee and Prairie du Chien Company, into whose Second Preference Shares, the mortgages are prospectively convertible at par, and with whose Common Shares the McGregor Stock is prospectively convertible at the rate of two for one, provided that within three years after their own bonds are extingnished (in 1866) the Milwaukee and Paririe du Chien Company elect to purchase the McGregor road out and out. The new road is being built at a cost of $18,000 mortgages and $22,000 stock per mile. Fifty-one miles are now in operation and 69 miles in progress.

The Board of Directors of the Chicago and Rock Island Company are understood to have appointed a Committee of Three of their number to negotiate for the purchase and consolidation of the Mississippi and Missouri Road, to which the Company have made considerable advances of money.

THE CONSOLIDATED TOLEDO, WABASH AND WESTERN RAILWAY.—The great consolidated Toledo, Wabash and Western Railway Company have unanimously elected the following Directors for the ensuing year: A. Boody, J. H. Knox, E. C. Litchfield, J. R. Jessup, J Ross, J. Spears, J. Dunlap, S. Humphreys, W. Kidd, W. A. White, E. Wells, L Tilton, G. Cecil, W. Colhurn, and J. N. Drummond.

The following gentlemen were elected officers of the Company: A Boody, President; W. Colburn, Vice-President and General Superintendent, and J. N. Drummond, Secretary and Treasurer.

MEETING OF RAILROAD PRESIDENTS.—The railroad presidents representing the Ohio and Mississippi, Little Miami, Ohio Central, Pennsylvania Central, and other railroads, who went on an excursion to Lawrence, Kansas, a few days ago, and who will meet a commission appointed to inspect the Union Pacific Railroad, have engaged to construct sixty miles of the Union Pacific road west of Lawrence by the 1st of next May.

The iron for this road has already been purchased and shipped by Edgar Thompson, President of the Pennsylvania Railroad. Seven miles of the track is already completed west of Lawrence, and cars will run to Topeka in November.

Arrangements have also been made to build a railroad between Leavenworth and Kansas City at once.

NEW HAVEN, Oct. 23.—The *Journal* of today says: Last night a construction train on the New York & New Haven Railroad came in collision with a milk train on the Danbury & Norwalk Railroad. Two passenger cars of the latter train were smashed and both engines demolished. A hatter from Bethel, named Hurlbut, was killed. Mr. Parsons, conductor of the milk train, was badly hurt The engineer, Mr. Lyman, of the New York & New Haven Railroad, who was on the milk train, was also injured, but not dangerously. Mr. Wills, track superintendent at New Haven; Hebron T. Douglas, Mr. Daily, John Dorlan and some others, in all estimated by some at thirty and by others at fifteen, were injured.

PRUSSIAN OPERATOR SENT TO PRISON.—August Adolph Voightman, Prussian railroad man, who came to this city last year with a considerable amount of money which belonged to the Berlin and Hamburg Railroad Company, and who went to Chicago and proposed to establish himself in business, has just been sent to prison for eight years in Prussia.

THE UNION PACIFIC RAILROAD.—George Ashmun. of Massachusetts; Charles T. Sherman, of Ohio; Springer Harbaugh, of Pennsylvania; Jesse L. Williams, of Indiana, and Thos. J. Carter, of Illinois, have been appointed Government Directors of the Union Pacific Railroad.

At a public sale of Government rolling stock, at Alexandria, last Tuesday, the locomotive General J. C. Robinson brought $16,500; the General Sickles, $16,300; the General Meade, $16,500; and the General Couch, $16,300. These engines cost the Government, about two years ago, $11,000 each.

The survey of a railway route from Lawrence, Kansas, to Pleasant Hill has been completed, and is found to be the most feasible, practicable and direct route to St. Louis, besides being 19 miles shorter than the route by Kansas city. The distance from Lawrence to Pleasant Hill is 55¾ miles.

The system of railways in India comprise 4,917 miles, of which 3,186 are open for traffic and most of the remainder will be open in two years, when the great cities of Lahore, Delhi, Allahabad, Calcutta, Nagpoor, Bombay and Madras will have railway communication with each other. The distance between the rival cities Bombay and Calcutta is 1,500 miles. The total expenditures thus far for these roads amount to $275,000,000, and when the works are all complete $387,500,000 will have been expended.

From the mines along the route of the Pennsylvania Railroad the coal mined was as follows, during the years given below:

| Years. | Tons to Pittsburg. | Tons Taken East. |
|---|---|---|
| 1853 ..... | 25,000 | 40,000 |
| 1854 ..... | 70,000 | 65,000 |
| 1855..... | 100,000 | 110,000 |
| 1856 ..... | 110 000 | 135,000 |

These are net tons of twenty-five bushels each. The statistics show that in 1861 the amount of coal brought into Pittsburg by this road was 162,536 tons, showing a very decided gain since 1856.

The Great Falls and South Berwick Branch Railroad will be sold at auction on Monday, the 4th of December, at Portsmouth. The track extends from the termination of the Great Falls and Conway Railroad in Somersworth, and through Somersworth and Rollinsford, in New Hampshire, and Berwick and South Berwick, in Maine, to the Portland, Saco and Portsmouth Railroad.

During the ensuing year it is probable that an important line of railway connecting New York with St. Paul, Minn., will be near completion. This is to be accomplished by the connection of the Minnesota Central with the McGregor Western at Austin, near the State line of Iowa. Both of these roads are progressing rapidly to the point of junction, and when united will form, via the Chicago and North Western, and Milwaukee and Prairie du Chien, a continuous railway route to St. Paul

☞ The negotiations between the Valley and Central companies of Minnesota, have at last resulted in an agreement whereby the former are to complete the road to a temporary terminus to West St. Paul, at St. Paul Bridge, by the first of June next.

and Minneapolis. A very large and important trade is to be opened by this line and the Northwest, drawing from the valleys of the Red river of the North and the Saskatchewan, will develop resources not yet appreciated by Eastern people.

The Lehigh Coal and Navigation Company notify stockholders that, to provide means for extending their railroads and other improvements, it will allow stockholders, on the 14th instant, the privilege of subscribing for new stock at par, at the rate of one share for every five shares then standing in their names.

The Prairie du Chien Railway Company will pay November 1 a dividend of 4 per cent. on their first preferred stock, and 3½ per cent. on the second preferred.

A St. Paul dispatch to the *Chicago Tribune* says: "It is currently reported that a company of New York capitalists have purchased the railroad through Wisconsin from Hudson to Bayfield for $175,000. They agree to build 40 miles by the 1st of next September, as the land grant is still held by the State. The sale at such figures is doubtful."

Gen. Beauregard is to be Superintendent of the New Orleans and Jackson Railroad.

The Pottsville *Miners' Journal* of Saturday says:

The quantity of coal sent by railroad this week is 80,775 03; by canal, 36,374 15; for the week, 117,149 18 tons, against 34,968 for the corresponding week last year. The demand for coal continues good, and the transporting companies are worked up to their full capacity. The low water in the canal is greatly retarding the trade in the lower portions of that work, and boats are sticking at many points. At this end the feeders give a plentiful supply. If we have not rain soon, it will form a serious drawback to canal navigation, as it now takes one-third longer to make a trip. The Navigation Company are buying up all the boats they can procure, but still the supply is short. The trade sums up this week as follows, compared with last year:

| | 1864. | | 1865 | |
|---|---|---|---|---|
| | Week. | Total. | Week. | Total. |
| Total..... | 151,406 | 8,323,288 | 279,617 | 7,204,118 |
| | | 7,204,118 | 161,406 | |
| | | 1,119,170 | 118,211 | |

For the reasons above stated, the supply this week shows a very large increase over the corresponding week last year, and will continue to increase at the rate of not less than 50,000 tons a week for the balance of the season. But notwithstanding this increase, the supply this year will be short of that of last year from 800,000 to 900,000 tons. We rejoice, however, that the further upward tendency of coal is now checked.

Since the decision of the Revenue Commissioner that the tax of six cents on the ton of coal must be collected on the Government standard of 2,000 lb to the ton, many of the coal operators are in favor of selling, after the close of this year, 2,000 lbs to the ton instead of 2,240 as heretofore. In all the cities abroad coal is retailed at 2,000 lbs to the ton—and they believe it would be better for all parties concerned that the weight of a ton of coal should be uniform, and conform to the Government standard of weight, like all other articles, and particularly since the Revenue Commissioner has fixed 2,000 lbs to the ton for taxation.

## MONETARY AND COMMERCIAL.

The money market is to be reported easier this week. Currency is growing plenty, and exchange has advanced, the demand being fully equal to the supply.

The demand on New York for currency having ceased, the reaction in that market is noticeable, as illustrating the influence of the West on Eastern money matters, the recent panicky market being almost entirely due to the withdrawal of Western deposits from Eastern banks; and the consequent calling in of loans by them, resulting in tightening the money market.

There has been very little change in gold prices. We give quotations of Wednesday:

| | Buying. | | Selling. | |
|---|---|---|---|---|
| New York Exchange..... | par@.. | .... | 1-10c.... | pr. |
| Philadelphia..... | par@.. | .... | 1-10c.... | pr. |
| Boston..... | par@.. | .... | 1-10c.... | pr. |
| Baltimore..... | ¼@.. | dis. | 1 10@.. | dis. |
| Silver..... | 25 @38 | pr. | 39 @41 | pr. |
| Gold..... | 45¼@.. | pr. | 46¼@... | pr. |
| Vouchers, city..... | 5 @.. | dis. | ....@.... | |
| Vouchers, country..... | 10 @15 | dis. | ....@.... | |
| Certificates..... | 2 @2¼ | dis. | 1 @.... | dis. |
| Q. M. Orders..... | 2 @.. | dis. | ....@.... | |

The New York stock market recovered, in part, to-day the decline of yesterday afternoon, and left off steady at 3 o'clock. Quotations compare as follows:

| | Tues. P. M. | Mon P. M. |
|---|---|---|
| U. S. 6 per ct. B'ds, 1881..... | 106¼ | 106⅞ |
| " 5-20 " old..... | 103½ | 103⅝ |
| " 5-20 " new..... | 101½ | 101⅝ |
| " 10-40 " ..... | 92⅞ | 92⅞ |
| " One-year Certificates..... | 98 | 98⅛ |
| 1-30s..... | 97⅞ | 98 |
| New York Central..... | 97 | 96½ |
| Erie..... | 86½ | 86⅝ |
| Hudson River..... | 106½ | 106 |
| Reading..... | 115½ | 114¾ |
| Michigan Central..... | 111¾ | 112 |
| Michigan Southern..... | 71⅛ | 71 |
| Illinois Central..... | 134 | 133 |
| Cleveland & Pittsburg..... | 78½ | 78¼ |
| Chicago & Northwestern..... | 30½ | 30¼ |
| " " pref..... | 63½ | 62⅞ |
| Cleveland & Toledo..... | 102½ | 102⅛ |
| Rock Island..... | 107¾ | 107 |
| Pitts., Ft. Wayne & Chicago..... | 97¾ | 97½ |
| Ohio & Mississippi Certificates..... | 27½ | 27 |

The earnings of the Chicago and Northwestern Railroad in Sept., 1865,

| | |
|---|---|
| were..... | $930,315 33 |
| Same period last year..... | 669,604 75 |
| Increase..... | $260,710 58 |

The traffic of the Atlantic and Great Western Railway for the month of September was:

1865.....$677.625 | 1864.....446,044 | Inc.....$231,581

The shipments of coal by the Wilkesbarre Coal and Iron Company in September were:

| | |
|---|---|
| By Canal..... | 39,492 tons. |
| By Rail..... | 12,045 tons. |
| Total month..... | 51,538 tuns. |

Shipments of Pittston Coal to October 7th, 1865, were:

1865..... 389,392 | 1864.....601,203 | Dec.....211,41[illegible]

The Chicago, Burlington and Quincy road earned in the last six months, $1,700,000 net.

The estimated earnings of the Cleveland and Pittsburg Company for the month of September last, were as follows:

| | |
|---|---|
| 1865..... | $243,413 40 |
| 1864..... | 242,171 59 |
| Increase..... | $1,241 81 |

A new schedule of freight rates by the C. H. & D., and D. & M.; L. M. & C. & X; and Marietta & Cincinnati Railroads and by river, takes effect Oct. 24, as follows:

| | 1st. class. | 2d. class. | 3d. class. | 4th. class | Flour |
|---|---|---|---|---|---|
| New York..... | 210 | 170 | 150 | 95 | 190 |
| Boston..... | 200 | 160 | 140 | 90 | 180 |
| Albany, Troy and Schenectady..... | 200 | 160 | 140 | 90 | 180 |
| Philadelphia..... | 185 | 150 | 135 | 85 | 170 |
| Baltimore..... | 175 | 140 | 130 | 80 | 160 |
| Buffalo and Dunkirk.. | 100 | 80 | 70 | 45 | 90 |
| Cleveland, Sandusky, Toledo and Bellair | 60 | 50 | 40 | 25 | 50 |
| Detroit..... | 65 | 55 | 45 | 30 | 60 |
| Pittsburg..... | 90 | 75 | 60 | 35 | 70 |
| Salamanca..... | 120 | 110 | 75 | 50 | 100 |

The following is a statement of coal transported on the Delaware and Hudson Canal for the week ending Oct. 14, 1865, and for the season:

| | Week. | Season. |
|---|---|---|
| Del. and Hud. Canal Company..... | 27,060 | 524,027 |
| Pennsylvania Coal Company..... | 2,334 | 25,971 |
| Total tons..... | 29,394 | 549,998 |
| For the same period last year: | | |
| Del. and Hud. Canal Company..... | 18,360 | 697,720 |
| Pennsylvania Coal Company..... | 15,370 | 422,202 |
| Total tons..... | 33,730 | 1,119,922 |

Earnings of the Detroit and Milwaukee Railroad for the second week in October:

| | |
|---|---|
| 1865..... | $44,166 |
| 1864..... | 27,472 |
| Increase..... | $16,694 |

The following are the comparative earnings of the Chicago and Alton Railroad for the first week in October:

| | |
|---|---|
| 1865..... | $94,818 |
| 1864..... | 66,845 |
| Increase..... | $27,973 |

The shipments of Pittston Coal to October 14, were:

| | |
|---|---|
| 1865..... | 408,510 15 tons |
| 1864..... | 623,474 12 tons |
| Decrease..... | 214,963 7-20 |

The earnings of the Chicago and Rock Island Railroad for the second week in October, were:

| | |
|---|---|
| 1865..... | $78,215 |
| 1864..... | 69,165 |
| Increase..... | $9,050 |

The traffic of the Great Western Railway of Canada for the week ending October 13, was:

| | |
|---|---|
| 1865..... | $91,329 89 |
| 1864..... | 59,298 34½ |
| Increase..... | $32,031 54½ |

The following is a statement of the approximate earnings of the Pittsburg, Fort Wayne and Chicago Railway Company during the month of September, ult., compared with the same period of last year:

| | |
|---|---|
| 1865..... | $759,405 58 |
| 1864..... | 675,359 64 |
| Increase..... | $84,346 72 |
| Earnings from Jan. 1 to Sept. 30: | |
| 1865..... | $6,305,437 63 |
| 1864..... | 4,813,475 97 |
| Increase..... | $1,491,961 66 |

# COUPON AND LOCAL TICKETS!

CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

CONSECUTIVELY NUMBERED

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

WRIGHTSON & CO.,

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD


## RAILROAD OFFICES AND AGENTS.

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St.

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati..**

F. F. Lord, General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A. B. Waters, Freight and Ticket Agent, Cor. Third and Walnut.

**Ohio & Mississipp!**

W. E. Bruce, Freight and Ticket Agent, Gagette Building, 82 West Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J. R. Reed, General Freight Agent, Six'h St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg, Contracting Agent, Vine St. under Burnett House.
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent, " "

**Central Ohio & Pittsburg, Columbus and Cincinnati.**

James E. Shields, General Agent, No 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A. J. Day, S. W. Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J. W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fonrth Street.

**Eaton & Hamilton.**

Six h St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burn House.

**New York Central.**

G. B. Gibson, S. W. Passenger Agent. W. H. Page Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Pittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent, No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.

Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

## Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10:10 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House. Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt.

BENJ. H. LATROBE AND C. H. LATROBE,

CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

The Old And Reliable Route.

Through to Pittsburg without Change.

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent.
my11 Pittsburg, Pa.

Change of Time, Monday, Aug. 7th.

THE

Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:30 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

WRIGHTSON & CO.

BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:00 A. M. | 10:40 P. M. |
| HAMILTON..... | 9:57 " | 11:33 " |
| DAYTON..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No. 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLARE, Supt.
J. P. SARVER, } Passenger Agts
CHAS. COOK, }

CENTRAL RAILROAD

—OF—

NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 4:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superinteudent.

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a.m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a.m. (Ex.); 3:00 (Ex.) 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex); 3:00 (Ex.); 12: 5; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 8:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

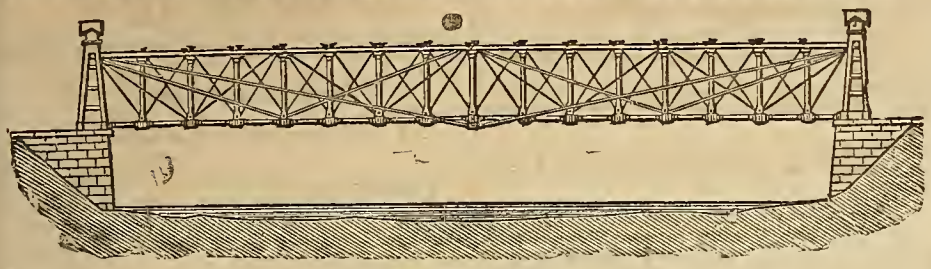
JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, FINK'S PATENT IRON BRIDGE, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

mar. 5, '63. 1y. Letter Box, 1292. C. J. SCHULTZ, Pittsburgh, Pa.

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS O

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

CINCINNATI.

BRIDGE BOLTS, Rivets [illegible], Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27,1y

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or not the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength and superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines. 419 y 1

## KNOX & SHAIN,
## Engineering and Telegraphic

INSTRUMENT MAKERS,

PHILADELPHIA.

## JOHN HOLLAND,

Successor to GEO. W. SHEPPARD,

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

No. 6 West Fourth Street,

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

## BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES**

Orders executed promptly to any extent for their

## CELEBRATED WHEELS

Either Single or Double Plate,

With or without Axles.

**WHEELS FITTED**

To Hammered or Rolled Axles,

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

## Manufacturers, Importers & Dealers

—IN—

## RAILROAD, CAR,

—AND—

## MACHINE SHOP SUPPLIES,

—AND—

## MACHINERY OF EVERY DESCRIPSION

47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

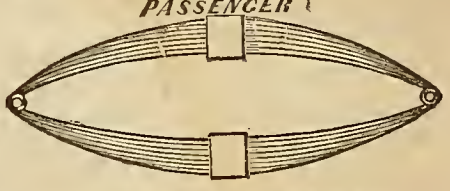
## RAILWAY SPRINGS.

**FREIGHT**

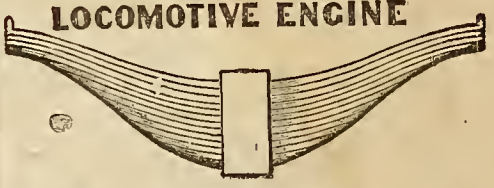




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

## W. M. F. HEWSON,
## STOCK BROKER,

**No. 21 West Third Street,**

CINCINNATI.

Buys and sells Stock. Bonds and other Securities on Commission only; negotiates Loans and takes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by wrunning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

**SPEED, SECURITY AND COMFORT,**

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lowe. than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHING. TON CITY.

W. P. SMITH. *Master Transportation, Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indionapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M. leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; E r net House Office, corner Vine and Baker streets, and at the spective depots, East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Shuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph, Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Lonis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:30 A. M | 8:00 A. M. |
| St. Lonis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent

JW D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis. at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago n advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving addres a either office.

H. C. LORD, President.
W. H. L. NOBLE,
Gencral Ticket Age t

C. R. COTTON, C ncinnati Agent.

## MOSELEY'S

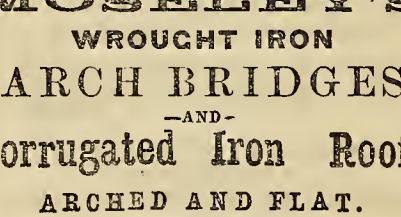
**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

**ARCHED AND FLAT.**



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Spt. 2 MOSELEY & CO.

BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facili es for forwarding the r work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cu to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!!



## FOUR PASSENGER TRAINS DAILY

**RAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2 30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P. M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express.

On Sundays, 10.24 P. M.

☞Through conections made for all points E Wes

WM. BARNS SUPT

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, NOVEMBER 2, 1865.

## THE RAILROAD RECORD.

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | *Depart.* | *Arrive.* |
|---|---|---|
| Morning Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 3: 0 P. M. | 11:30 A. M. |
| Night Express | 10:00 P M. | 9: 0 A. M. |
| Lightning Express | 7:0 P. M. | 4:35 P M. |
| Morrow Accommodation | 5:20 P M. | 8:00 A. M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Express Mail | 9:0 A. M. | 5:30 A M. |
| Night Express | 10:50 P. M. | 7:30 P M. |

MARIETTA AND CINCINNATI,

| | | |
|---|---|---|
| Mail | 7:40 A. M. | 6:15 P. M. |
| Hillsboro Accommodation | 3:40 P. M. | 11:00 A. M. |
| Night Express | 7:5 P M | 5:0 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Toledo and Detroit | 7:00 A. M. | 9:25 P. M |
| Dayton and Sandusky | 7:0 A. M. | 5:30 P M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P M. |
| Indianapolis & Cambridge City | 6:0 A M. | 10:05 P. M. |
| " " | 4:00 P. M. | 12:5 P. M. |
| Toledo, Detroit & Huntsville | 5:00 P. M. | 12:50 P. M. |
| Hamilton Accommodation | 7:0 P. M. | 6:45 A M |
| Richmond & Chicago | 6:00 P. M. | 12:25 P. M |
| Hamilton Accommodation | | 7:55 A. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 10:05 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:10 P. M. | 12:25 P. M. |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Springfield & St Jo. Express | 2: 0 P. M. | 4:45 P. M. |
| St Louis and Chicago Express | 5:15 P. M. | 1:30 A. M. |
| Lawrenceburg and Harrison Accommodations | 4:30 P M. | 8:30 A. M. |
| Harrison Accommodation | 9:2 A M. | 2:35 P. M. |

OHIO AND MISSISSIPPI.

| | | |
|---|---|---|
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A. M. |
| Louisville Special Train | 3:15 P. M, | 1:50 P. M. |
| Louisville, St. Louis and Cairo Express | 7:50 P. M. | 11:00 A. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4:00 P. M. | 7:45 A. M. |

COVINGTON AND LEXINGTON.

| | | |
|---|---|---|
| Morning Express | 6:00 A. M. | 10:12 A M. |
| Evening Express | 2:35 P. M. | 6:08 P. M. |

## RAILROAD FROM CINCINNATI TO KNOXVILLE.

In times past, we have written and said so much on this subject unavailingly, that, we had almost given up the idea of such a work. Either, we had conceived a false idea of its great importance, or, the public was utterly insensible to its own merits. Now, however, the subject is revived, and the daily Cincinnati papers contain various articles setting forth the vast advantages of a *direct* road to the South, from this city. It would be of incalculable advantage; but, the citizens of Cincinnati seem indifferent to the result; the argument has been laid before them twenty times, in every possible form, and yet, utterly disregarded. We see, in the papers, an attempt to trace up the idea of this road to persons who had nothing whatever practically to do with it; and as the work is hardly more than begun, can certainly claim little. There *is* a history about the *attempt*, which is worth preserving. The *first* public demonstration on the subject was made at a public meeting, held at the Exchange, Front Street, (Cincinnati) in August, 1835. That meeting was composed (for the time) of a respectable number of intelligent citizens. That meeting was addressed by E. D. MANSFIELD, Esq., E. S. WILLIAMS and Dr. DONALD DUKE. Mr. Mansfield exhibited the route, distance, probable cost, and advantages of such a work. The proceedings were published in a pamphlet, with a little map of the country This meeting resulted in creating quite a Railroad excitement; and produced the only real efforts which Cincinnati has made to extend her own commercial interests. The idea of a railroad through Kentucky was extended to that of a railroad from Cincinnati to Charleston (South Carolina) South Carolina entered into the plan with spirit, and put forth great and generous efforts to accomplish it; but, it was really defeated, by the selfish and exclusive policy of Kentucky That State was unwilling that a railroad should be made through her territory, *even by others* (for she proposed to do nothing) to Covington (substantially Cincinnati), unless two others (one to Louisville, and the other to Maysville,) should be made also! The burden was too great; no effort of Cincinnati was able, even with the generous aid of South Carolina, Georgia and Tennessee, to accomplish so great a work. This great design was, therefore, defeated. Fortunately, however, the plan to make the Covington Road, as far as Paris (Ky.), was combined with that of making the L. Miami Railroad, the Whitewater Canal, and other improvements, so that, by the aid of a small contribution from Cincinnati, the Covington Road was commenced, and has been completed to Lexington. Several years later, an attempt to continue the road to Danville was made, and some subscriptions were made in Cincinnati, and this effort accomplished twelve miles more of road to Nicholasville. There it rests, about 100 miles of road, after *thirty years of spasmodic effort* (!) being made on a route *towards* Tennessee. This route, however, though if properly continued it may accomplish the object, is by no means the right one, except in part, for the interests of Cincinnati. The true route, in view of all the ultimate interests, is as follows:

1. The main line of the Cincinnati Southern Road should leave the Covington & Lexington Road at Paris, and passing through Winchester (Clarke county), and Richmond (Madison county), should pass on over the ridge Road to Cumberland Gap, and thence to Knoxville. This entire route is both direct and practicable. Previous to the war, the whole Georgia net-work of roads had been completed, and finally terminated in Knoxville, by the Chattanooga route So also, the Virginia South-Western Roads, had been completed to Knoxville; but the South Carolina line had not been. South Carolina had advanced her roads to her Northern limit, and was pursuing the construction of the Blue Ridge Road through the Robson Gap when the war began. Of course, all operations upon it have ceased; but there can be no doubt, that if the financial affairs of that State can be revived, the work will be resumed successfully. Its value will depend, however, upon the commercial results at Charleston. If the commerce of that city should revive, then it will soon become much greater than it ever has been, and the Blue Ridge Road can be completed, and the Knoxville Road to Cincinnati,—there is no reason why Charleston should not rival the most prosperous of the North Atlantic Cities. This depends, however, on the events of only one or two years; for, this will determine whether Charleston is to be rebuilt and revived. In the mean time the Road at Knoxville would connect with all the Georgia and Virginia Roads, and even with Charleston *via* Augusta. This line, then, from Cincinnati to Knoxville would draw the trade of all the South, embraced in the limits of Georgia, South Carolina, East Tennessee and South-west Virginia to Cincinnati, and there could be no diversion to any other place. So much advantage to be gained by a single line of Road, *has not been offered anywhere else in this country.* The line to be constructed would be less than 200 miles, and although some parts of it would be difficult of construction, the whole would not cost over $8,000,000. A cash subscription of four millions would be amply enough to make the whole work. It would be absurd to say, that in this day of accumulated wealth and abundant capital, such a work could not be easily made.

2. In connection with this main line, there *ought* to be, with a view of developing a country remarkable for mineral resources and manufacturing advantages, a Branch road,

from the main line to the Big Sandy River. This road might diverge near Winchester, and follow the North Fork of the Kentucky River to the head waters of the Licking, passing near Burning Spring to the Paint Creek of the Sandy, and thence down the Sandy to Louisa, the head of good navigation. This would be a circuitous route; but no road in the United States passes through a country so rich in coal, iron, and petroleum. We say *petroleum;* for, though we know not whether any petroleum wells exist there now, yet, all geological science on this subject must fail, if the region of the Big Sandy is not very abundant in this article. Looking to the future, then, we say, that such an auxiliary to the main line, will sooner or later, become indispensable. The time has come, when Cincinnati should take some decisive action on this subject. The time is big with events; nothing will stand still. If Cincinnati stands still, other places will not. The South is now to be developed with extraordinary energy and rapidity. It must come to the Valley of the Ohio, and if Cincinnati wants it not, it will go elsewhere, not to return. Few places have had more done for them, and less for itself, than Cincinnati. But, this will not do in the future. It must help itself, or see the world go by.

## SOUTHERN SHORT LINE.

Mr. Finn, of Erie, Pennsylvania, and President of the Paris, Irvine, and East Tennessee Railroad Company, has written a letter to a gentleman of this city, in which he says that a representation of European capitalists is daily expected at New York, and through whom this company have every prospect of making negotiations for the money necessary to build this line of road through from Paris to Cumberland Gap.

An extension of this road from Cumberland Gap to Morristown, a distance of about fifty miles, taps the East Tennessee and Virginia Railroad at a point near forty miles East of Knoxville

The construction of these important links in the Knoxville line is what Cincinnati is deeply interested in, but there should be no waiting on English capitalists to undertake it. Besides, it is a matter of very questionable policy to allow so much of our railroad stock to go abroad, particularly when our citizens are abundantly able to keep it among themselves. Cincinnati should own and direct the road which shall put it in immediate connection with the interior South and its railroad system. There should not be a day's delay in giving the enterprise all the vitality it wants, even though there should be no prospect of dividend returns; but there need be no doubt of the profitableness of the road if extravagant debt is avoided in its construction.—*Cincinnati Commercial.*

The Kansas-Pacific Railroad Accepted.—The long pending controversy in regard to the acceptance of the first 40 miles of the Kansas branch of the Pacific Railroad was finally decided and accepted by the President on the 27th ult, and Government bonds will be issued to the road to the amount of about $700,000.

## THE NASHVILLE & CHATTANOOGA AND NASHVILLE & NORTH-WESTERN RAILROADS.

The correspondent of the Cincinnati *Gazette*, writing from Atlanta, gives his experience as follows:

A year ago, to make the trip from Nashville to Chattanooga or back without some terrible disaster or heart sickening delay, was a feat rarely accomplished, in spite of the best exertions of engineer, conductor, brakesmen and all concerned, and even in the few instances where the trip was accomplished without detention or accident, sixteen mortal hours were spent upon the road. Now you leave Nashville at 8 A. M., dine at Decherd, and at good, convenient, early supper time, are landed in Chattanooga When I came over the road a couple of days since, there was no vexatious stoppage at any point; no mishap; no running behind time; no "screw loose" anywhere. And such I am told is every day the case. As a friend remarked to me, "having the time table before you, you can set your watch by the running of these cars and always have it right."

To any one who has ever been in the Army of the Cumberland or the old Army of the Ohio, I need offer no other explanation of the excellent management of this road, than simply to state that Col Wm. P Innis, formerly of the Michigan Engineers and Mechanics, is Superintendent, and Lieut. Col S. B Yates, of the same regiment, Assistant Superintendent. These gentlemen are also Superintendents of the Nashville & North western Railway; and those who remember their self-sacrificing energy in the service of the Government, will be glad to know that they have secured a position which, while it enables them to bring all their fine administrative talent to bear, is so honorable and comfortable in an individual point of view.

It is highly to the credit of our northern neighbor, Michigan, that during the war she gave to our Western Army, which in all departments contained so many able and excellent men,—its best artillerist, C O Loomis; its best general engineer, W. P. Innis; its best Provost Marshal, J. G. Parkhurst; and its best freedmen's commissioner, Clinton B. Fisk.

In our last issue we referred to the arrangements made by Mr. J. W. Brown, the clever and enterprising Passenger agent of these roads, with the Illinois Central and O. & M. Railways. When the Government shall turn them over to their former owners, it will be with new appliances of every description, new connections, and a general improvement in all respects, suited to the important relations they are to sustain in the future of the South.

Athens and Saratoga Railroad.—The "Daniel Drew," the first engine for the Saratoga and Hudson River Railroad at Athens, No. 366, manufactured at the "Taunton Locomotive Manufacturing Company," Taunton, Mass., came over the Hudson and Boston Railroad on the 10th ult. She will be placed upon the track immediately, and steamed up for business. It is expected that a train will pass over the entire length of the road within thirty days.—*Canajoharie Radii.*

From the N. Y. Tribune.

## STATISTICS OF CRIME AND DISASTER.

The unusual statement of crimes and disasters during the last six months has been often remarked, and it seems the subject is now about ripe for conclusions of figures. That the public have noticed so large an increase in this fatal species of home production may be sensibly attributed to the lapse of a great war, and the revelation and recoil of the passions which it absorbed. If some have been skeptical as to the extent of individual outbreaks on society, it has been for want of statistics, and partly because crime, which has dabbled so much in catastrophe of late, has been forgotten in other misfortunes, of which the last half year has been full Regular murders have almost found oblivion in railway disasters. But every chord of suffering life seems to have been stricken; and we have heard of a host of nondescript assaults upon the "house of life," beside homicide, marricide, parricide, matricide, sororicide, infanticide, familicide, patricide (attempted)—hardly pausing at cosmicide, which we interpret to be a violent taking off in honor of the journal which has made the greatest display of murders. Railway slaughter renders necessary an addition to the vocabulary, and we have it to hand, namely: *viatricide*, or murder of a traveler. Altogether here is an interesting field of inquiry for our Kennedys and DeBows.

### STATISTICS AND CURIOSITIES OF MURDER.

The entire estimate of the capital crimes committed in the United States in the last half year it is doubtless impossible to give. But from April to October 10,—95 murders are counted from metropolitan files, exclusive of 12 manifest homicides and half a dozen assassinations by Indians and guerrillas. Twenty-five murderous attempts are recorded, 9 cases of wife murder, and 7 of attempted wife-murder, which seems to have been a terrible specialty with male criminals in New York and New Jersey. In contrast with this, there appear to have been but two husband-murders. Eight instances of familicide, or murder of a family, including three persons, make the most shocking feature of the category. Four fratricides, two parricides and matricides, two double and two quadruple murders, eight infant-murders, half of which were cases of abortion, were recorded. In the West and South west three lynch-law trials took place. Singularly, amid all this excess of life taking, we only find 33 suicides.

The assassination in April of President Lincoln exceeded all crimes in atrocity and daring, and thence crime seems to have begun its startling episode. The great mass of murders and crimes generally were perpetrated between June and September, viz.: 15 in June, 21 in July, 20 in August, and 26 in September. The last month was also by far the most fatal with respect to railroad accidents, although it was supposed that crime had its climax in the previous summer months. We conjecture that about 150 persons have lost their lives by criminal hands, not remarking those who have perished by the railway Juggernaut.

### EXTRAVACANCE OF CRIME—PHILOSOPHY IN POISON.

Eccentricity and monstrosity seem to have been prodigal in the chapter of the criminal calendar just closed. Of extraordinary cases in America, most all of which seem to have been brute outrages of a multiple kind, may be mentioned—the Joyce tragedy in Roxbury,

Mass.; the double murder at Summerville, Pa.; the familicide in Tennessee; the wholesale execution of Judge Wright and his four sons in Missouri, and the Starkweather family murder. But the great crimes of Europe have far exceeded all these in general wonder and mystery, and it is seldom that a grouping of such strange elements are found together in the social history. In systematic wickedness, and depth of motive they show a far older experience than American crime. Intellect, science, a sort of philosophy, and even religion, were sunk in the plot and woven in the deed, with the spirit of a young Lady Macbeth, a Fosco, a Thenardier. How Constance Kent, a child of 13, came to put away her little brothers, is still a study. Dr. Pritchard, a medical reviewer, daily resumed the patient task of killing his wife by slow poison. Mrs. Winsor kept a hospital for infanticide. Southey murdered the children of his mistress with a parade of Malthusian philosophy, for fear that they would starve, omitting, of course, to kill himself; and a Swedish priest poisoned a dozen of his parishioners with the sacrament, out of pity for their wretchedness. Crime of this complex character seems weird, appalling, and extravagant beyond expression.

### THE VAGARIES OF CRIME.

Of the proportion of crimes in general it is scarcely possible to arrive at conclusions. But it should be remarked that twenty cases of nameless outrage—a class of crime which seldom invites record—were printed in the last six months. Curious and monstrous among other flagrancies were the placing of torpedoes on a railroad, an attempt to throw a train off the track, the burning of three houses by a girl fourteen years old, polygamy to the extent of ten wives by a man who afterward hanged himself, and in another case to the number of four; highway robbery by a boy eleven years of age; highway robbery by a politician, mail robbery by a postmaster, and the malign biting off of noses! Add to these the publication of obscene books and papers, and the defacing and misfeaturing of natural scenery, several cases of which came under the law. An ex-Congressman was also convicted of subornation of perjury We must not omit to mention the story, if only to set it down as a hoax unexcelled in ghastliness—of the boy who deliberately cut off his arm to keep from going to school. This story, reported from New Jersey, was widely circulated.

### THE COLOSSAL IN ROBBERY—BANK OPERATIONS.

Large operations of robbery appear to have been in proportion to other crime. The succession of several robberies of banks within a short time, and the apparent ease with which they have robbed, have already called forth words of caution from the public journals against a state of financial insecurity. The following statement of bank and kindred robberies alone will show that this warning was not without reason of facts:

| | |
|---|---|
| January—Bank of Crawford, Pa. | $150,000 |
| March—National Central, N. Y. | 50,000 |
| March — Banking House, Blands, Louisville | 50,000 |
| May — Bank, Walpole, N. H., (recovered) | 45,000 |
| June—Bank, Richmond | 200,000 |
| Aug.—Bank, Wellington, O | 100,000 |
| Aug.—Banking House, Portland | 25,000 |
| Sept.—Bank, Concord | 300,000 |
| Sept.—Treasury, Texas | 30,000 |
| Sept.—Adams Express | 25,000 |

This comprehends only robberies committed by outside parties, and we cannot pretend to say the list is complete. A few of the robberies were very remarkable. In the instance of the Crawford Bank (evidently a worked up robbery), it seems that while the cashier was at work in the evening, the thief entered, extinguished the gas, and made away with the bonds, before any light could be obtained. Mr. Bland of Louisville was imprisoned in his own safe, and nearly suffocated to death. The Concord Bank robbery is recent and well known.

### ROBBERY AND ABSTRACTION.

A list of bank robberies would not be complete without a statement of the immense defalcations and swindles of the past six months, which have assailed the safety of banks from within, as burglars from without. We append a generic list:

| | |
|---|---|
| May—Bank, New Haven Savings, about | $100,000 |
| Aug—Bank, Phœnix (Jenkins') | 250,000 |
| Aug. — Banks, &c., New York, (Ketchum's) | 4,000,000 |
| Aug.—Erie Railroad bonds (Jones') reported $100,000 to | 500,000 |
| Aug.—Custom House, Memphis, reported | 1,250,000 |
| Aug.—Quartermaster at Paducah, by clerk | 25,000 |
| Sept.—Governm't bonds, Bliss, N.Y. | 36,500 |
| Sept.—Revenue Collector, Ohio (defaulter) | 90,000 |
| Sept.—Auerbach swindle, Louisville | 80,000 |
| Sept. — Railroad bond forgeries, (Gladwin) | 204,000 |
| Sept.—By a New York book-keeper, | 10,000 |
| Oct.—Government bonds by Gen. Bristow, Lynchburg | 80,000 |

A few of these were recovered. The list, of course, does not include the alleged paymaster frauds, Navy Yard frauds and official corruptions of which the papers have been full. It must not be omitted, however, that a State Treasurer of Ohio was removed from office on charge of heavy embezzlements. Of important operations in the professional line may be mentioned the robbery of Mr. Veazie at Albany of $11,000; that of $25,000 from an Indiana farmer; $48,000 at Chattanooga; the $20,000 burglary at Detroit and $50,000 at Philadelphia. Forgeries have also been very numerous and extensive, but it is, of course, impossible to give statistics.

### RAILWAY MASSACRE—A NEW CHAPTER FOR SEPTEMBER.

Railway accidents open up a large account. From May 15 to Oct. 15 there were 68 in all, or 63 in six months, up to September. Of these 24 were collisions, 9 explosions (two of which did not occur on the line), 6 came from bad bridges and culverts, 22 from rotten ties, broken rails and axles, and 12 were precipitations, more or less uncomfortable to the traveling public. Ten accidents occurred in June, 8 in July, 15 in August, 27 in September, and in the whole year to date, not less than 100, comparing the present with our former statement of accidents published in August. Thirty million dollars would be a modest reckoning for the loss involved in the demolished lives, trains, and properties of the past year, and probably not less than 300 persons have been killed and more than 600 injured in every shape by accidents in the same time.

### CALAMITY BY STEAMBOAT AND SHIPWRECK.

Steamboat explosions and shipwreck naturally accompany this class of traveling accidents Ten explosions and eight collisions of steamboats are noted, along with 45 burnings, sinkings and wrecks of vessels—63 disasters in all, upon the water. Several of these catastrophes, which have crimsoned river and ocean far and wide, are remembered in all their awful poetry, and helpless agony and terror. By the explosion of the steamer Sultana some 1,200 victims found a muddy grave in the Mississippi; 400 went down in the burning ship Nelson; 250 with the Brother Jonathan, and 100 were drowned by the collision of the steamers Pewabic and Meteor on Lake Michigan. Nearly 3,000 lives, it may be guessed, have been lost at sea between April and September. The translatable loss cannot be far inferior to that sustained upon the railroad. Eight additional disasters are recorded in October.

### ACCIDENTS AT LARGE—EXPLOSIONS.

The chapter of miscellaneous accidents takes a great variety of calamities, such as death from the incavation of walls, wharves and embankments, burning, in founderies and elsewhere, crushing between cars, being run over and run away with, and from shooting, cutting, and poisoning by prescription, all of which causes convey standard warning to society and the individual to be on guard. Seventy mortal cases of this class of accident were reported, and 20 where injuries were sustained. There were beside 8 explosions of boilers and magazines, several of which were particularly frightful in their shock and damage. Counting those by steamboat and rail, there were altogether 27 severe explosions, followed by great loss of life in general, and enormous loss in the case of the Sultana.

These explosions embrace such as may be termed causes—those which resulted from other occasions of disaster have not all been counted.

### DISASTER IN MASS.

To recapitulate: there have been, within six months, 131 accidents to travel by land and water, wherein were 32 collisions and 19 explosions; and about 150 prominent accidents of all kinds, outside of the area of ruin, belonging simply to fires.

### THE AREA OF CONFLAGRATION.

Even in this respect the last half year seems to have been otherwise than ordinary. One hundred and fifty-five fires between April and October 15, make no insignificant item in our business account of loss by accident. In six months up to September we count 142.

These fires, too, reveal startling figures, and make a light whereby the commercial world may read. The loss in 20 fires for the last 40 days was $6,000,000; in 25 fires, where each loss was $100,000 or upward, $16,000,000; in 45 fires for five months, $19,270,000; and altogether, about 30,000,000, which we estimate to be as near the truth as it is possible to arrive with the present available data.

Half a dozen great fires combined to swell these losses, chief among which were those in the Petroleum regions; $10,000,000 by the destruction of Government works in Tennessee; $3,000,000 by the late large warehouse conflagration in New York; $500,000 by that of Massachusetts factories; and amounts of $200,000 and $300,000 by burnings elsewhere.

### LOSSES OF $150,000 AND UPWARD.

Below we give a miscellany of fires as distinguished by loss. They occurred between the middle of May and October:

| | |
|---|---|
| Pork-packing house at Indianapolis, | $400,000 |
| At South Dedhan, Mass. | 150,000 |
| Avenue C, New York | 150,000 |
| Balmoral Manufactory, Meriden, Ct. | 300,000 |
| Nashville Government Warehouses, | 10,000,000 |
| Louisville, Drug house | 200 000 |
| Rolla, Missouri | 300,000 |
| Saratoga, N. Y. | 350,000 |
| Fire in Quebec | 1,000,000 |
| Iron Works at Buffalo | 150,000 |
| Barnum's Museum | 2,000,000 |
| Drug Mills at Jersey City | 150,000 |
| Cotton Factory, Petersburg, Va. | 200,000 |
| Williamsburgh, Factories | 150,000 |
| Water and South sts. fire | 650,000 |
| Fire in St. Louis | 300,000 |
| Fire at Troy | 150,000 |
| Fire in Augusta, Maine | 150,000 |
| Warehouses, Cherry-st., New York. | 3,000,000 |
| American Rice Mills | 500,000 |
| Fire in Chicago | 170,000 |
| Cotton at Memphis | 300,000 |
| French & Richards' Druggery, Phila. | 300,000 |
| Cotton at Mobile | 1,000,000 |
| Coal Oil at Pithole | 150,000 |
| Fire at Belfast, Maine | 300,000 |
| Fire in Bridge-st., New York | 1,000,000 |

EX-DOMICILIARY—TOWNS IN CINDERS.

The foregoing list, without being entirely comprehensive, is suggestive. Great fires, with a damage to the amount of $1,500,000, occurred in Canada, principally at Toronto and Quebec. In Quebec 91 houses were destroyed, and 100 families left houseless. Twenty five buildings were burned at Troy, and as many at Augusta, Me.; and in the great fire at Belfast, Me., 100 buildings were consumed, and in West Forty-fourth st., New York, 74 families were burned out. Towns like Idaho, Denton, Md., Forest City, Cal., and Galveston, were almost entirely destroyed. In Carlisle seven children were burned to death, and in Chicago eight firemen were buried under falling walls. One thousand acres of Massachusetts forests were burned away. There are no means of making exact computations of life and property losses.

DISASTERS EXTRAORDINARY.

Here follows a statement of the most remarkable catastrophes of the last six months:

| | |
|---|---|
| Explosion of steamer Sultana; lives lost (reported).. | 1,400 |
| Explosion of Mobile Magazine; lives lost | 300 |
| Collision, Baltimore & Washington Railroad; killed and wounded | 50 |
| Collision, Ohio & Mississippi Railroad; killed and wounded | 165 |
| Central Ohio Railroad accident; killed and wounded | 30 |
| Railroad explosion, Tenn. & Alabama, | 130 |
| Loss of Brother Jonathan (lives) | 250 |
| Loss of ship William Nelson (lives) | 400 |
| Loss of Pewabic and Meteor (lives) | 100 |
| Mississippi steamer explosion (lives). | 33 |
| California steamer Yosemite explosion, 52 killed and 60 wounded | |
| By storm on the Gulf Coast (reported) drowned | 90 |

DELUGE AND EARTHQUAKE.

The late storm on the coast of Texas and Louisiana is said to have swept away whole settlements like Calcasieu and Sabine, and drowned about 90 persons. Six hundred cattle were washed from only one farm, during a sudden rise of the waters 20 feet above the land. Equinoctial tempests in this section of the country inflicted immense damage according to all report.

Earthquake was felt during August, in Memphis, and in various places throughout the South-west. But its heaviest shocks were experienced in California and Oregon during September. The citizens of Eureka, Santa Clara, San Francisco, and other localities, were thrown into temporary unsteadiness by being rocked and shaken in the cradle of this phenomenon. Mt. Hood, Oregon, was at the same time reported to be in a state of eruption.

IN FINE.

To recapitulate: a fair calculation from the foregoing would place the entire damage to property by disasters of a public character at about eighty millions. Robberies may be set down at about twenty millions more.

We have thus given a fair glimpse of a field of statistics, which, if not inviting, appears necessary, at all events, to the public knowledge. Such statistics are painful, but are not without a certain high usefulness and even philosophy, which should commend them especially to the census-takers in these days of social science and statistics Society should understand its pulse, commerce should feel its pocket, and the world should know what proportion crime and disaster bear to the economy of the world.

---

STEAM POWER ON THE WESTERN PLAINS—"The recent discoveries of coal among the mountains of Colorado, are destined to work a revolution in transportation across the Western plains. A company has already been organized in Boston and New York, with a capital of $6,000,000, for the purpose of placing steam traction engines on the roads between the Mississippi river and the Rocky mountains, a distance of some 650 miles. An engine of thirty two tons weight is now in process of construction, and will be put in operation as soon as it and the necessary wagons are ready.

The route from Nebraska City to Denver has been recently surveyed, and is reported to be well adapted to the use of traction engines. The freight business across the plains is said to be very great—amounting, the present season, it is estimated, to 200,000,000 pounds. By the use of these engines, it is said, trains can cross the plains in six days, while mule and cattle trains occupy from 45 to 60 days in crossing.

The present charges for freight—15 cents per pound—will be greatly reduced; and this reduction will be likely to increase the business, which, with the territories of Montana, Idaho, New Mexico, Colorado and Western Nebraska, may extend beyond the limits of all present calculations."—*Toledo Blade.*

---

GWYNN'S FALLS RAILROAD. — A sufficient amount of the stock—fifty thousand dollars—required by the charter, having been subscribed, the corporators of this enterprise met on Saturday last, at the Franklin House, corner of Howard and Franklin streets, and organized by appointing Hon. John Wethered, Chairman, and J. Howard McHenry, Esq., Secretary. On motion, G. Slothower, Esq., was chosen permanent President of the company, and the following named gentlemen Directors to serve for one year, viz: John Wethered, T. J. Myers, J. H. McHenry, Mr. Harris and Theodore Motte. There was an earnest and energetic spirit manifested at the meeting. Nearly or quite one hundred thousand dollars of the stock has already been subscribed. The road will cost to complete it, about $250,000.—*Baltimore Sun, Oct.* 10.

## THE UNION PACIFIC RAILROAD EAST DIVISION—THE SMOKY HILL ROUTE TO COLORADO.

Recent discoveries made on the Smoky Hill route for a railroad across the plains to Colorado and towards the Pacific, coupled with the identification and co-operation of distinguished and potential eastern railroad men in the Union Pacific Railroad organization, assure the steady and earnest prosecution of work on a railroad across Kansas into Colorado, in as short time as capital and labor combined, can compass the construction of so long a line across the plains.

The discovery of the merits possessed by the Smoky Hill route, over the Platte route, has already caused the transfer of the overland stages to it, whereby, between Atchison and Denver 116 miles of distance has been saved, besides other advantages realized, as described in the report of Lieut. Fitch, U. S. A., given in full in the *Register* of last week.

Between St. Louis as a base and Denver as a terminus, which places, via Kansas City, Topeka, Smoky Hill Fork, etc., are 874 miles apart, there will be in use next month 350 miles of road, being two-fifths of the entire route!

From St. Louis to Kansas City, 283 miles, the Pacific Railroad of Missouri is in operation. From Kansas City to Lawrence, 40 miles, the Union Pacific Railroad is in use. From Lawrence to Topeka, the capital of Kansas, 27 miles, the Union Pacific Railroad will be completed during the month of November, proximo, making the distance from St. Louis to Topeka, 350 miles, or two-fifths of the way, as stated, from St. Louis to Denver. From Topeka to Denver the distance is 524 miles. From Topeka to Fort Riley, 53 miles, the road will be opened in May next, whereupon 120 miles of the Union Pacific Railroad will be brought into use Then, too, doubtless, Fort Riley, in lieu of Atchison, (whence overland stages and trains now start out on the journey across the plains,) will, for a time, become the frontier railroad station, and stage and wagon rendezvous, till another link of iron track be laid down and the locomotive farther advanced on its conquering way.

The overland trade west of the Missouri, comprising travel and freight destined for and from Colorado, New Mexico, Utah, Nevada, etc., is at this time a trade of vast values and proportions, employing large numbers of men, stages, wagons, mules. This trade will seek the road which advances farthest and fastest west; and hence, as the Union Pacific Railroad is stretched out across the grassy areas hitherto roamed by the buffalo, it will receive and accommodate a through business for and from the still farther West in quantity to yield a good interest on the cost of the work.

The Union Pacific Railroad is in verity a national enterprise in dignity, necessity, consequence. And that it is now in hands that appreciate its mission in cheapening and quickening transit between the two oceans, and in facilitating communication between the Atlantic, Middle and Pacific States, is an important consideration to the new State of Colorado, and all having investments therein; and also to all interests in New Mexico, Arizona, Utah, Nevada.

---

In a report dated September 12, at "Ellworth," 196 miles from Atchison, Isaac E. Eaton says:

"I have returned from Denver, via Smoky Hill river route, to this point, with ten men,

without a military escort, without molestation from the Indians or any other source. Two hundred and fifty mules, belonging to Butterfield's Despatch, reached here a few days since, with which I return, and stock the road to Denver. The road has been fully stocked for a daily line from here to Leavenworth, [Atchison] and with the stock I have with me, it will be complete to Denver in fifteen days." * *

"*At all the cattle stations the amount of hay that can be procured is limitless, and along the whole route there is abundance of grass and watering places*

"At fifteen of the stations there are *large springs of water*, varying from five to twenty feet in depth, and these springs, or pools formed from the springs, are filled with bass or other pan fish, sufficient to supply all the demands of the stations. There is *no alkali whatever on this route*, and if all the sand (including the crossings of streams) was put together, it would not reach five miles. The road bed itself is the best natural one I have ever seen, and I fail to do the Smoky Hill justice when I say it is one hundred per cent. superior to either the Platte or Arkansas routes, in every respect. I have no doubt of the verification of my prediction, when I say that, in twelve months from now, there will not a wheel turn, destined for Colorado, New Mexico and Utah, from St. Joseph and points south of it, *except by this route.*

"The Butterfield Overland Despatch Company are making arrangements to build a road from Pond's Creek on the Denver route via Fort Lyon and the McFerren trail to Santa Fe, and thus save one hundred miles in distance over the route now travelled between Leavenworth [Atchison] and New Mexico.

"The company will, also, during the coming season, extend their Denver route via Berthoud's Pass, over the Rocky Mountain range—the Middle Park, down the White and up the Uinta rivers, through Provo Canon to Fort Crittenden, and thence to Salt Lake City.

"This route, the Smoky Hill, is the natural track for the Pacific R. R., and the only one in which the people of Kansas, Missouri, and the Middle and Central States are particularly interested.

"The company are erecting the most substantial kind of buildings for stations, and also the bridges over all the streams and ravines. The stations are frame, made of yellow pine lumber, one and a half stories high, thirty two by sixteen feet in front, and kitchen attached, eighteen by twenty feet. The stabling is made of the same material and substantially. Those will all be completed by the first of November proximo. The stations all framed in the pineries near Parkhurst station, and in close proximity to the saw mills of Colorado, and shipped down the road by the returning freight trains of the company, and are erected at less expense per station than the miserable hovels erected on the Platte route."

---

These are glowing truths and conclusive facts, showing the superiority of the Smoky Hill stage route, soon to be occupied by the Union Pacific Railroad.

Nor is it singly as the route to Colorado and a route to the Pacific that the Union Pacific Railroad, East Division, is to be considered; but rather as the butt end of a line which, from an eligible forking point in Colorado, shall have connections diverging across New Mexico into Arizona, as well as across Utah and through Nevada.

With the Union Pacific Railroad opened into Colorado, and a branch from it to the Rio Grande at Santa Fe, a military railroad may be built thence down the valley of the Rio Grande to the Mexican (Maximillian) line, midway between the gulfs of Mexico and California. And thus from the heart of the Mississippi valley at St. Louis, a continuous rail line would open a way for commercial traffic through Colorado into New Mexico and Arizona, that would also serve to deliver troops and munitions on the national frontier, at a menacing neighbor's vulnerable point. There is a portentous future significance in a railroad diverging from Colorado across New Mexico to the threshold of a monarchy established by fraud and sustained by oppression, and which is at the same time a reproach and a defiance to the United States, that, on propitious opportunity, will be rebuked and punished.

The Union Pacific Railroad will open the facilities necessary for profitable intertrade into New Mexico and Arizona, and may hasten the *rectification* of the south boundary line by its extension south of the mouth of the Rio Colorado, so that the commercial river of Arizona may be entered from the gulf of California, within the territory of the United States. Increase of population and development of mineral interests in New Mexico and Arizona, through railroad facilities to be opened across Colorado to the Mississippi at St. Louis, will have diplomatic and military as well as mining and merchandising considerations.

A comprehensive contemplation of the aspects and bearings of the Union Pacific Railroad invests it with considerations which commend it more and more to the favor of the Washington Government, to the co operation of interests to be subserved by its early construction, and to the confidence of the people of the whole nation.—*R. R. & M. Register.*

---

The Switch-back Railroad.—No person can lay claim to having seen that part of Pennsylvania until he has passed over the Switch-back (gravity) railroad. It is, in fact, a marvel of engineering, boldness and skill, such as probably has no equal elsewhere. From the artificial basin in the river above Mauch Chunk, with pockets, chutes, &c., three inclined planes ascend the slope, to a short plateau, gaining about two hundred feet perpendicular by this first ascent. There they connect with the two main lines of railroad, one for the empty cars going Westward, the other for loaded trains coming Eastward. We shall briefly notice the former.. On the passenger taking his seat in one of the two or three cars making a train, which are built sufficiently large to hold about a dozen persons each, a signal is given and away goes the train, being propelled by a safety-car from behind. This is drawn up the hill by a powerful stationary engine at the top, the connection being made by a pair of broad iron bands. The length of this incline is a full half mile, with a slope of two in seven, making it as steep as an ordinary roof. The entire elevation gained is 650 feet, or 840 above the river. The ascent is made in about five minutes, affording just sufficient time to take in the sublimity of the surrounding scene. The stranger is apt to hold his breath and grasp firmly the sides of his vehicle; but if he be not too giddy to look at the track, he will observe arrangements which insure the most perfect safety. Between the two tracks extends a single but heavy tram-rail, to which has been bolted an iron rail, with huge tusks pointing upward at every few inches. The braking apparatus of the safety-car is so framed as to drop and instantly catch hold upon these wrought iron teeth, which would thus put a check to any conceivable number of vehicles in a single second. Every thing about the concern denotes the utmost attention to safety.

After reaching the summit, the train starts off, with a moderate speed at first, but increasing in velocity until it attains twenty miles per hour. The railroad proceeds along the face of the mountain, having easy curves and an average descent of forty-five feet to the mile, which affords the gravity power required. At the end of this seven miles grade, occurs a second plane of nearly five hundred feet perpendicular height, on reaching the top of which we are fully one thousand feet above the Lehigh.

Crossing the mountain toward the North, the road next turns eastward, descending the opposite slope by a grade of 250 feet per mile, and reaching the head of the basin far below the out cropping of the coal. It then returns toward the west, and afterward toward the south, reaching a point where, by its own momentum, it *switches back* upon a track at the foot of a third plane, by means of which and a fourth it regains the heights at Summit Level. It will thus be seen that, in Panther Creek Valley, it describes a complete circle, whose extent is nearly ten miles, before arriving at the place of beginning. Thence to Mauch Chunk is a uniform grade, the two tracks crossing each other at a point nearly midway between that borough and Summit Level. In fact, they are two separate roads belonging to one company.

On a pleasant day the trip is one of the most delightful that can be imagined. The time required to go and come does not exceed three or four hours, and the fare for the round trip is only fifty-five cents.

Over this gravity railway are daily sent, on an average, 2,500 tons of coal, ready for market. Ten cars, containing about forty tons in all, are fastened together, placed under the charge of a brakeman, and sent off on their way rejoicing. A train, or "set," can be despatched every ten minutes without difficulty.

From the lowest point on its course in the valley, a locomotive railroad has been put in operation two miles, as far down as the Bull Run mine. Loaded cars are hauled up this road to the foot of the plane, and thence sent forward by the usual channel. At every few hundred yards sidings connect with the collieries and the villages.

---

Chicago Railway Junction.—The three companies controlling the different lines of street railway in this city, have not only taken united action in the matter of fares, but will soon be joined in a material sense, the several lines meeting in one grand central point at the corner of State and Randolph streets. The lines of the south and west divisions all centre there now, and all that is needed to complete the plan is the long talked of laying of a track along State street to the bridge, across that and on Wolcott street to Michigan, and along that street to Clark, along which now run all the cars of the North Division. The work is now in progress, Michigan and Wolcott streets are being put into condition—graded and paved, and the track already down on the bridge and its extension—will soon be laid along the whole length. Passengers will then be able to travel into the North Division from the others and return, by a simple change of cars, instead of being obliged to walk several blocks as is now the case.—*Chicago Times.*

[From Cincinnati Commercial]

## OIL IN KENTUCKY—OIL PROSPECTS IN CUMBERLAND COUNTY.

Eds. Com:—The American well that yielded its unknown millions of gallons of oil, was bored in 1829. The Cronghan well, in the Salt Lick bend of the Cumberland River, seven miles below Barksville, was plugged up thirty years ago, because of the escape of oil in such large quantities that it made it disagreeable to the workmen, who were boring for salt water. The Garrett well, on Crocus Creek, six miles above the mouth, was bored, and like the Cronghan well, plugged, to get rid of the oil, its presence preventing the completion of their enterprise, the obtaining of salt water. The Gilreath spring, running pure oil for sixty years, was bored in 1861 by Roseberry, who struck oil, but plugged it on account of the war, and it was not opened until some weeks since. When tested it yielded in two minutes' pumping forty gallons of fine oil It is now plugged, awaiting the adjustment of conflicting claimants. The twenty other oil springs that claimed the attention of citizens and strangers have all been forgotten since the striking of the Crocus well, which was yielding, on yesterday, pure oil to the utmost capacity of the tuoing. It is, therefore, certain that it is yielding more than one thousand barrels per day This well is yielding more oil per day than all the wells in Virginia and Kentucky together. Depth one hundred and ninety feet. The well at or near Creelsboro is a good well, and supposed to yield one hundred barrels per day. Only seven miles from the Crocus well, ten other wells are now being bored in the county, and in less than two months twice that number will be in operation. This is but the beginning of the great end in view.

D. R. HAGGARD.

## ROAD LOCOMOTIVES.

Thomas Aveling, of London, has just published an interesting and valuable work entitled "Road Locomotives—an Epitome of the New Road Locomotive Acts, for the use of Owners and Drivers." Although road locomotives have only recently acquired sufficient importance to necessitate the passing of acts of Parliament, for their regulation, yet their history goes back eighty years or more. In 1784 Watt patented a road locomotive with a wooden boiler; a little later Trevethick invented and constructed a steam coach; and subsequently Hancock, Gurney, and others worked at the question. For twenty years, however, it rested until the late Mr. Boydell again revived the principle by the introduction of the traction engine. In 1861 an act was passed for regulating the use of locomotives on turnpike roads. This act removed the prohibitory tolls and substituted an equitable scale; but by it the Secretary of State had power to restrict or prohibit the use of locomotives in certain districts. The undue exercise of this power led to an application to Parliament for, and the passing of, the Locomotive Act of 1865, by which the Home Secretary's power of restriction and prohibition is removed, and the power of making regulations for the use of road locomotives placed in the hands of the local authorities of towns where the population exceeds 5000. This act came into operation on the 1st of the present month; and in our issue of that date will be found an outline of its various clauses. We have since received a handy book upon the subject, which contains an epitome of the locomotive acts of 1861 and 1865, that will be more useful than the two acts in full, as many of the clauses of the 1865 act are inserted only for the purpose of annulling clauses contained in the act of 1861. No one need fear to act upon Mr. Aveling's little book, for the epitome contains the whole law of both acts, and has been carefully revised by an eminent lawyer, and will be found most useful by those to whom it is addressed, namely, the owners and drivers of road locomotives. There is no doubt that the road locomotive, not only for agricultural purposes, but also for the removal of heavy loads, will become more and more general now that the question of steam on common roads is placed on a common footing.—*Mechanics' Magazine.*

## A BIG RAILROAD LAWSUIT—CINCINNATI AND CHICAGO RAILROAD.

That part of this road from Richmond, Indiana, to Logansport, a distance of 108 miles, has for several years past been in the possession of a party of New York lessees and other Wall street railroad men, without paying rent or any other consideration to the stockholders for its use, as by contract with the Company—by its Board of Directors—they were bound to do.

As the rebellion is now over, and persons conversant with the facts and history of this matter have returned to their homes in Ohio and Indiana, the time has arrived for the shareholders of this road to take legal measures, without further delay, to dispossess these men of it, as the stockholders have been plundered long enough

Two or three lawsuits of this same character are now in progress in the United States; one of them is by the shareholders and creditors of the Kentucky Central Railroad, from Covington to Lexington, and a few miles further, to recover possession of that road from the bondholders, which there is no doubt they will succeed in, as the equity of the case is immensely in favor of the stockholders and creditors.

The claim of the shareholders of the Cincinnati and Chicago Railroad Company to these 108 miles of the road, can be made a stronger case for the stockholders, either in law or equity, than in any suit of a like kind ever brought in any court in the United States; as, perhaps, there is not in Indiana a quarter section of land, or a house and lot, held by so weak a title as these New York lessees and their assigns have to depend on.

The writer of this article is a shareholder in this road, and understands what he is writing about, and feels a strong interest in this proposed movement, and now sounds this bugle-call for the immediate attention of every creditor and shareholder of this Company, to the subject of this communication.

And, I also say, that when action in this matter is decided on by the stockholders, no man that had a hand in breaking down this old Company, and swamping it, either from want of business capacity or otherwise, must be intrusted with place or power, either as *attorney or director*, in this new movement.

From $2,500,000 to $3,000,000 of stock of this railroad has been issued, and the largest portion of it must be held by Western men and women, and all paid for; and I again call upon the holders of it to *determine*, both individually and also in the general meeting of shareholders, (which will soon be called) that the railroad shall be recovered by us, if there be law and equity in the land.—*Chicago Tribune.*

## R. R. FROM RENO TO PITHOLE.

Reno is as yet a small place, with but few wells put down, but from its natural site and its advantages of trade, is no doubt destined to become one of the centers of the oil trade, if not, indeed, the principal one It is most favorably and beautifully situated, and is the freight terminus of the Franklin Branch. Gen. Burnside, who is expected here to-night, has commenced work upon a railroad that is to connect Reno with Pithole, which it is expected will be done in 60 days. Mr. Culver is the builder and projector. I may mention that, in order to avoid the notorious impediments which are usually thrown in the way of railroad enterprises by the Pennsylvania Legislature, the corporators introduced a bill through a very quiet old member from the eastern part of the State, for a charter for a railroad from the "head waters of Baker's Creek to Shafer's Run, said Road not to interfere with the privileges" of a certain road down in the eastern part of the State. As nobody knew or suspected the locality, the bill was passed unobstructed.—*Cor. N. Y. Tribune.*

It will be remembered that Prof Agassiz left New York for Brazil last spring on a scientific mission, sailing in the steamship Colorodo, then newly built for the Pacific Mail Steamship Company, his outfit being furnished by a rich and liberal merchant of Boston, and transportation to Rio Janeiro for himself and his numerous party provided by the owner of the steamer. Our late advices state that he has been most cordially received by the Imperial Government, and every facility given him for the prosecution of his researches. The work which Prof. Agassiz went out to perform is being vigorously pushed. His party has been divided, and the several sections dispersed to various parts of the vast empire, the one under the immediate direction of Professor Agassiz being occupied, at last accounts, in the ascent to the headwaters of the Amazon in a steamer furnished by the government.

## UNIFORM GUAGE IN MISSOURI.

A rage for internal improvements exists in Missouri at the present moment, and a most sensible rage it is too. The completion of the Missouri, Pacific and Kansas City Railroad already begins to tell upon the receipts of the road. A large portion of the Leavenworth and Atchison travel, hitherto monopolized by the Hannibal and St. Joseph Railroad, now passes over the Pacific.

The question of uniform gauge is also agitated. The Hannibal and St. Joseph's gauge is 4 feet 8 inches; the North Missouri is to be changed to suit it. The Union Pacific, running to Lawrence, is 4 feet 8 inches, and it is proposed to alter the gauge of the Missouri Pacific from 5½ feet to meet that of the Kansas road. Ultimately this will become necessary in order to ship freight over the river to the East without breaking bulk. The extension of the Missouri railroads to the Iowa line is almost assured by recent success in negotiating bonds, and the wealth of St. Louis will be materially enhanced by the triumph of the undertaking.—*Cor. N. Y. Tribune.*

The Great Western Railway, of Canada, is building, at Windsor, an iron steamer 220 feet long, on which to carry entire trains of cars across Detroit river.

## PACIFIC RAILROAD ITEMS.

The Salt Lake Telegraph of the 10th mentions the return of S. B. Reed, Chief of Engineers, and a party of thirteen persons, who had been engaged in surveying the ultra-montane division of the Union Pacific Railway. They had run three routes over the Humboldt mountains; and they give the preference to the northern route, which extends from near the junction of the Humboldt river eastward through an easy pass into Clover valley; thence to the desert, meeting the line run to the desert from the east. This is the most direct line, as well as the most practicable, as other passes present considerable difficulties. By it the distance from Salt Lake to the Humbolt valley is 220 miles, with no heavy work, and grades of not more than 40 feet to the mile through the Cedar mountains, and 40 to the mile through the Humboldt range. The party were very much embarrassed from lack of water.

The President gave an audience, on Friday, to a delegation of gentlemen representing the interests of the Union Pacific Railroad Company. The Secretary of the Treasury, the Secretary of the Interior, and Col. Simpson of the Topographical Engineer Corps, were present at the interview in connection with the business which brought the delegation to Washington.

Bonds of the Pacific Railroad.—The Union Pacific Railway Company have secured, it is said, the promise of the Goverment to issue the bonds due the Company, as provided for by act of Congress, they having completed the number of miles of railroad required by law.

Southern Pacific Railroad.—When the Pacific Railway was first suggested several sections of the country put in their claims for the Eastern terminus. The Government then made the explorations of the several routes. A New Orleans paper says of the Southern route as compared with the only route deemed practicable:

On behalf of the Southern route, it was urged that it was nearly 200 miles shorter than the other, that the engineering difficulties were less, and that the estimated cost of construction was only about half as much, while it ran through a better country, with a better climate. On the other hand it was declared that the Northern route was more national, and it would accommodate a greater variety of interests, and would develop the mineral resources of a large portion of the national domain.

When war was threatened, but had not yet commenced, Congress seemed inclined to favor both grants of land, as a concession of rival interests, but the breaking out of the war threw the Southern route altogether out of the question, and the line near the 35th parallel was selected as the only one to which the Government favors could be extended.

Concerning another and a stiff more Southern route but little has been said. The route commences at New Orleans, and following the line of the Opelousas Railroad to New Iberia, on the Teche, proceeds along the Texas and New Orleans line to Houston, which is the focal center of the Texas railroad system. The track will then be continued by a projected line to San Antonio, thence following the Columbus, San Antonio and Rio Grande line, it will be continued through the richest of the Mexican States to Guayamas, on the Gulf of California. The various lines which form the separate branches of this grand railroad scheme are chartered, and most of the track between this city and San Antonio (550 miles) is already laid. The route is not only feasible, but attractive throughout its entire length. It runs through a settled country, rich in mineral and agricultural resources. In time this will assuredly constitute one of our railroad routes to the Pacific, and one in which New Orleans is particularly interested. Of this route Prof Bayley, Chief Engineer of the New Orleans, Opelousas and Great Western Railroad Company, remarked, in a report made in July, 1860: "The entire distance from New Orleans to the Pacific would be 1,300 miles; the route would afford a lucrative way business throughout its entire length, and its termini on the Mississippi, and upon the Pacific coast would be accessible to shipping, a very important consideration."

To put New Orleans in complete connection with the entire railroad system of Texas, the Opelousas Railroad Company must lay down the track on the already graded way from Berwick's Bay to New Iberia, and the Texas and New Orleans Company must complete the road from New Iberia to the Sabine, a distance of 116 miles. In doing this they will be filling up links in one of the grandest railroad enterprises ever projected—an enterprise which will eventually make New Orleans the center of a trade vast and lucrative beyond all present conception.

## SMELTING IRON WITH GAS.

Much attention is now being directed to an invention described in the London *Mining Journal*, due to Dr. Gurlt, and generally known as the "gas fuel method of smelting," by which the useful portions of the fuel are thoroughly utilized, while all impurities are left behind. The latter advantage is peculiarly applicable to iron and steel making, as the chief impurities in these metals are derived from the fuel. Dr. Gurlt exposes iron ore to a current of gas, of which a small proportion is burnt to give the necessary heat. A small exposure merely reduces, a longer carbonizes, so that either malleable iron steel, or cast-iron can be obtained at will. By applying gas fuel to a reverberatory furnace, and blowing in air by pipes over the bridge, a true blow-pipe flame is obtained, and also, by the regulation of the wind, the atmosphere of the furnace may be kept either neutral, oxydizing, or reducing, at will. With such a furnace Dr. Gurlt hopes to melt steel in large quantities, without injury to its quality. The gas is obtained by burning the fuel in a close, deep fire-box, by means of a blast of air at the bottom.

The adjourned meeting of the creditors and stockholders of the Mississippi and Missouri Road, on Friday last, adopted the following scale:

If the offer of the Chicago and Rock Island Railroad Company, of $5,500,000, is accepted by the Mississippi and Missouri Company, there can be paid as follows: 1st. Mortgage Bondholders, Eastern Division, including Income Bonds and also interest up to July 1, 1865—Par. 2d. Mortgage Bondholders, Eastern Division—80 per cent. on $400,000 Bonds. Oskaloosa Division Bondholders, including Income Bonds and Scrip—62½ per cent. Land Grant Bondholders, including Income Bonds and Scrip—70 per cent. 3d. Mortgage Construction Bondholders—30 per cent. Stock—16 per cent.

## RAILROAD NEWS.

The United States Circuit Court at Chicago has, in recent decisions, sustained the State Courts of Iowa in perpetually enjoining counties and cities from levying or collecting a tax for the payment of bonds issued for railroad purposes that have been declared illegal by the State Supreme Court. The city of Keokuk alone, have almost as heavy a debt outstanding as the State of Iowa, and being immediately interested in the pending suits for a long time past, under such decisions should feel great financial relief. Western towns and counties, however, should offer some compromise in liquidation of their heavy debt issues made in times of speculation and inflation, and so long held as unavailable property by innocent purchasers. The city of Keokuk committed itself to a compromise settlement of its debt previous to the above decisions being rendered. Mr. J. F. Franklin, No. 112 Broadway, is the special agent.

The Great Western Express to Exeter, England, travels at the rate of 43 miles an hour, including stoppages, or 50 miles an hour without including stoppages. To attain this rate a speed of 60 miles an hour has been reached. A speed of 70 miles an hour is about equivalent to 30 yards per second, or 35 yards between two beats of a common clock. All objects near the eye of a passenger traveling at this rate will pass by his eye in the thirty-fifth part of a second, and if thirty-five stakes were erected at the side of the road, a yard asunder, they would not be distinguishable one from another. If painted red they would appear collectively a continued flash of color. If two trains with this speed passed each other the relative velocity would be 70 yards per second; and if one of the trains were 70 yards long, it would pass by in a single second.

The Philadelphia Ledger is informed by a correspondent who has access to the figures, that the receipts of the Pennsylvania Railroad Company in round numbers the current year, are two millions of dollars ahead of last year at corresponding time, and will reach at least eighteen millions of dollars this year.

The Missouri River Railroad is to be completed from Kansas City to Leavenworth, Kansas, and it is to be a virtual continuation of the Missouri Pacific Road. Leavenworth is said to contain 20,000 inhabitants.

A railroad from Lexington, Lafayette county, to Beaverville, in Cooper county, Missouri, to connect with the Pacific road by the Tipton branch is being discussed. It would traverse three of the richest counties of the State.

The Mobile and Ohio Railroad seems to be getting in very bad odor. Complaints against it are prevalent everywhere, from its southern to its northern terminus. People accuse its active managers of incompetency and many of its agents and conductors of rascality.

The grain elevator of St. Louis, just completed, cost $500,000, and required over 4,000,000 feet of timber—said to be a greater quantity than is contained in any other building in the world. All that is required to load a vessel or wagon from this elevator is to open the spouts and let the grain down.

The project of extending the Harlem Railroad northward from Chatham to Bennington, Vt., so as to connect with the Western Vermont Road, and form a straight line from New York to Montreal, is likely to be carried out. It is stated that $1,300,000 of the capital stock of $1,800,000 has already been subscribed, Commodore Vanderbilt having taken $500,000, and Mr. Park of Bennington, $200,000.

The coupons of the Morris and Essex Railroad bonds, due 1st prox, will be paid at the Merchants' National Bank, New York.

A large proportion of the coupons of the First Mortgage Bonds of the Mariposa Company, including those of January, 1866, have been converted into scrip.

The work of building the railways in Mexico is being pushed vigorously by Smith, Knight & Co., the great railway contractors of South America and elsewhere.

The Lawrence Railroad from Newcastle to Youngstown is ready for the iron and the laying commenced last Wednesday. Cars will be running to Lowellville, O., early in December.

Ellian Holliday, a brakeman on the Chicago and Northwestern Railway, was dangerously hurt last Saturday, by falling from a car and being run over, having both legs terribly mangled.

## PERSONAL.

J D. Hays, Esq, late of Buffalo, and formerly agent of the Grand Trunk, of Detroit, has been appointed Assistant Superintendent of the Michigan Central Railroad. *vice* Chas. H. Hurd, Esq, resigned. He is very highly commended by the Detroit papers, and is a gentleman of large experience.

Gen. Minty, formerly of the 4th Michigan cavalry, bas been made General Freight and Passenger Agent of the Michigan Central Company at Jackson.

Gen. Alexander McDowell McCook has resigned, and will hereafter identify himself with Butterfield's overland mail route.

Mr. W. H. Hall, late manager of the Illinois and Mississippi Telegraph office in this city, has been appointed Superintendent of the telegraph line of the Chicago, Burlington and Quincy Railroad Company, and has gone to Galesburg to assume the duties of that position. Mr. Hall is one of the best telegraph men in the West.

J. Durand, Esq, Superintendent of the Marietta and Cincinnati Railroad, has been appointed Superintendent of the Pittsburg, Columbus and Cincinnati Railroad, and has signified his acceptance of the position.

Albert Fink, Esq., has been chosen to fill the vacancy of General Superintendent of the Louisville & Nashville Road, occasioned by the resignation of B. Marshel, Esq.

☞ Captain F. D May has been appointed passenger agent of the Columbia and Indianapolis Railroad Company, at Philadelphia.

## MONETARY AND COMMERCIAL.

Secretary McCullough's policy of contraction appears to have pleased nobody, and been productive of much inconvenience. But $50,000,000 have been funded, so far, and even this small amount has produced a serious stringency in the market, and thrown out all but strictly first class paper.

The single good effect of this will be to limit speculation. With the large amount of greenbacks going South for cotton, and which must remain there for circulation, we shall not be troubled with a plethora of money, and will move cautiously until the Secretary's report be read and his future policy disclosed to Congress.

The following were the quotations for exchange and coin:

| | Buying | Selling. |
|---|---|---|
| New York | 1.10 dis @par. | 50@1-10 pr. |
| Philadelphia | 1 10 dis @par. | 50@1-10 pr. |
| Boston | 1-10 dis @par. | 5 @1-10 pr |
| Gold | 115⅛@145¾ | 146¼@146½ |
| Silver | 137@139 | 140@141 |

The New York stock market opened strong this morning, but it was irregular in the afternoon, and left off rather weak. Governments were lower under the foreign news. Prices compare as follows:

| | Mon. A. M. | Tues P. M. |
|---|---|---|
| U. S. 6 per cent. Bonds, 1881 | 106⅝ | 106½ |
| " 5-20 " old | 103 | 103⅛ |
| " 5-20 " new | 101⅛ | 101 |
| " 10-40 " | 92¼ | 92⅛ |
| " One-year Certificates | 98 | 97⅞ |
| 7-30s | 97⅞ | 97⅞ |
| New York Central | 98⅜ | 99¼ |
| Erie | 92⅜ | 91⅜ |
| Hudson River | 116⅞ | 118 |
| Reading | 115¼ | 115½ |
| Michigan Central | 113 | 113 |
| Michigan Southern | 73¾ | 73⅝ |
| Illinois Central | 138½ | 137 |
| Cleveland & Pittsburg | 83½ | 82 |
| Chicago & Northwestern | 31½ | 34 |
| " " pref | 67⅜ | 67½ |
| Cleveland & Toledo | 103⅞ | 104¼ |
| Rock Island | 104¾ | 109 |
| Pitts., Ft. Wayne & Chicago | 105 | 105½ |
| Ohio & Mississippi Certificates | 28¾ | 28½ |

The earnings and expenses of the Cleveland and Toledo Railroad for the fiscal years ending April 30, 1864 and 1865, have been as follows:

| | 1864. | 1865. |
|---|---|---|
| From passengers | $784 059 41 | $1,098,695 65 |
| From freight and mails | 907 206 42 | 1,005,402 99 |
| Total | $1,691.265 83 | $2,104.098 64 |
| Total running expenses | $729.772 54 | $1,080,756 04 |
| State taxes | 23 227 78 | 48 015 65 |
| Government tax | 28,781 79 | 53 872 64 |
| Miscellaneous expenses | 16,588 26 | 19,811 93 |
| Rents | 65,368 78 | 59,577 93 |
| Interet and exchange | 843 97 | 5,866 27 |
| Profit and loss | 3,468 38 | 1 417 62 |
| Total | $868,051 50 | $1,269,318 03 |
| Net earnings | $ 23.214 33 | $ 834,780 56 |
| Interest on bonded debt | $179,869 22 | |
| Dividend, Oct. 25, 1864, 5 per cent | 245,768 42 | |
| Dividend, April 25, 1865, 5 per cent | 246,873 68 | |
| | | 672,511 32 |
| Balance | | $ 162,269 24 |

—equal to 4¼ per cent. on the capital stock

The company have declared a dividend of 5 per cent., free of Government tax, payable on the 25th inst.

Statement of approximate earnings of the Marietta & Cincinnati Railroad for the third week in October, 1865:

| | 1865 | 1864. |
|---|---|---|
| Passengers | $12,132 00 | $10,193 58 |
| Freight | 14 326 50 | 10 096 04 |
| Mail, express and telegraph | 7,250 00 | 1,169 58 |
| Total | $27,708 60 | $21 369 20 |
| Total this month to date | $77,571 80 | $61,975 66 |
| Commencing Jan. 1st | 662,887 03 | 746,333 97 |

The earnings of the T. W & W. Railroad for the month of September, were $377,981 28, against $243,840 14 in 1864; an increase of $134,141 14.

The earnings of the Grand Trunk, for the week ending Oct. 21st, amounted to $147.107 against $123,270 for the same week last year—increase $23,837.

The Norwich and Worcester Railroad Company earned Sept. 1, 1865, $78,430 42; showing a gain of $22,401 67 over 1864.

Earnings of the Michigan Central Railroad for the second week in October:

| | |
|---|---|
| 1865 | $116,430 |
| 1864 | 92,546 |
| Increase | $23,884 |

The Michigan Central Railroad earned for the third week in October:

| | |
|---|---|
| 1865 | $100,202 82 |
| 1864 | 90,013 14 |
| Increase | $10,189 68 |

Annexed are the earnings of the Racine and Mississippi and Northern Illinois Railroads for the week ending October 14:

| | |
|---|---|
| 1865 | $24,128 |
| 1864 | 12,533 |
| Increase | $11,595 |

Earnings of the Detroit and Milwaukee Railroad for the third week in October:

| | |
|---|---|
| 1865 | $47,853 |
| 1864 | 32,688 |
| Increase | $15,165 |

The Macon and Western Railroad Company make the following showing:

| | |
|---|---|
| Earnings in August | $43,618 77 |
| Expenses | 23,387 08 |
| Net | $20,231 69 |
| Earnings in September | $61,538 41 |
| Expenses | 34,629 93 |
| Net | $26,908 48 |

Net earnings two months, $47,140 17, heing over 3⅓ per cent. on capital.

The receipts of the Racine and Mississippi and Northern Illinois Railroads for the week ending Octoher 21 were:

| | |
|---|---|
| 1865 | $24,214 63 |
| 1864 | 12,803 40 |
| Increase | $11,411 23 |

Receipts from January to October:

| | |
|---|---|
| 1865 | $565,328 09 |
| 1864 | 465,382 79 |
| Increase | $99,945 30 |

# COUPON AND LOCAL TICKETS!

CONSECUTIVELY NUMBERED.

Having recently put one of *SANDFORD, HARROUN & CO.'S* Machines in our Printing Establishment, we are prepared to execute, with despatch, all orders for

CONSECUTIVELY NUMBERED

# COUPON AND LOCAL TICKETS,

As now used by all the leading Railroads in the World.

*Ticket Agents and other Railroad Men are invited to call and see our work.*

**WRIGHTSON & CO.,**

*No.* 167 *Walnut Street, Cincinnati.*

OFFICE OF RAILROAD RECORD


## RAILROAD OFFICES AND AGENTS.

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St.

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A B Waters, Freight and Ticket Agent, Cor. Third and Walnut.

**Ohio & Mississippi**

W. E. Bruce, Freight and Ticket Agent, Gagette Building, 82 West Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg Contracting Agent, Vine St. under Burnett House
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent, ", "

**Central Ohio & Pittsburg, Columbus and Cincinnat**

James E. Shields, General Agent, No 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A. J. Day, S. W. Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J. W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fonrth Street.

**Eaton & Hamilton.**

Six h St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burn House.

**New York Central.**

G. B Gibson, S W. Passenger Agent. W. H. Page Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Ittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Baltimore and Ohio.**

H Heckert, Gen. Western Agent, No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.

Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

## Indianapolis and Cincinnati

## RAILROAD.

THREE THROUGH TRAINS DAILY

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A M |
| Springfield and St Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10: 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harris n..... | 9:30 A. M | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House. Spencer House, and Gibson Heuse Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city. ROBT. MEEK, Superintendent.

T. B. LORD, Genl Ticket Agt.

---

## BENJ. H. LATROBE AND C. H. LATROBE,

## CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.

Through to Pittsburg without Change.

THE PITTBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent.
my11 Pittsburg, Pa.

---

Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....0:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:30 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Traios leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

## WRIGHTSON & CO.

## BOOK & JOB PRINTERS,

*167 Walnut St.*

CINCINNATI, OHIO

---

# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:00 A. M. | 10:40 P. M. |
| HAMILTON ..... | 9:57 " | 11:43 " |
| DAYTON ..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK ..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:05 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

## THIS IS THE ONLY ROUTE

TO THE

## OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

### SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

**Ample time is allowed, at all hours, for meals.**

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

### CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast cornor of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLARE, Supt.
J. P. SARVER, } Passenger Ag'e
CHAS. COOK, }

---

## CENTRAL RAILROAD

—OF—

## NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

---

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a.m. (Ex.); 3:00 (Ex.) 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

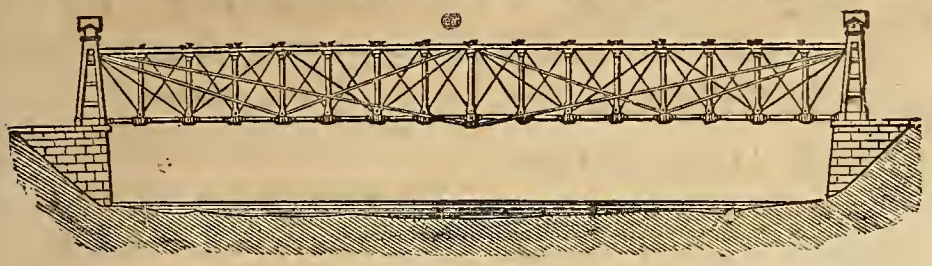
---

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11a. m. and 5 p. m.

Tickets may be procured at the offices of Westcott's Express to New-York and Brooklyn. Baggage checked from the residence points on this road and its connections. 640*

# FINK'S PATENT
# IRON RAILROAD BRIDGE.



(Plan of Bridge.)

The undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms, **FINK'S PATENT IRON BRIDGE**, in spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use; requires no repairs, and no adjustment, but is perfectly adjustable.

**For plans and particulars, apply to**

mar. 5, '53 1y. **Letter Box, 1393.** **C. J. SCHULTZ, Pittsburgh, Pa.**

---

**HOLENSHADE, MORRIS & CO.**

MANUFACTURERS O

*Carriage, Tire, Machine, Plow, & all kinds of*

## SCREW BOLTS,

Nos. 170 to 180 Columbia Street, bet. Elm and Plum,

**CINCINNATI.**

**BRIDGE BOLTS,** Rivets [illegible] Screws, and Thresher Teeth, made on short notice and on the most favorable terms Nov 27.1y

---

WRIGHTSON & CO.,

RAILROAD PRINTERS,

167 WALNUT ST.

---

N. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.
## ENGINEERS,

BROAD AND HAMILTON ST.

***Philadelphia, Pa.***

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without horing), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive En- 419 y [illegible]

---

**KNOX & SHAIN,**

**Engineering and Telegraphic**

INSTRUMENT MAKERS,

**PHILADELPHIA.**

---

JOHN HOLLAND,

**Successor to GEO. W. SHEPPARD,**

MANUFACTURER OF

## GOLD PENS,

GOLD & SILVER PEN & PENCIL CASES,

**No. 6 West Fourth Street,**

(UP STAIRS.) CINCINNATI, O.

Feb. 4, 1 y

---

BRIDGES & LANE.

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR**

## FINDINGS

—AND—

**MACHINERY,**

OF EVERY DESCRIPTION.

COR. COURTLANDT & GREENWICH STREETS

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

**Wilmington, Delaware,**

MANUFACTURE

## CHILLED WHEELS

—AND—

## TYRES,

**FOR RAILROAD CARS**

AND

**LOCOMOTIVE ENGINES**

Orders executed promptly to any extent for their

**CELEBRATED WHEELS**

Either Single or Double Plate,

With or without Axles.

**WHEELS FITTED**

**To Hammered or Rolled Axles.**

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

---

Manufacturers, Importers & Dealers

—IN—

**RAILROAD, CAR,**

—AND—

**MACHINE SHOP**

**SUPPLIES,**

—AND—

**MACHINERY OF EVERY DESCRIPSION**

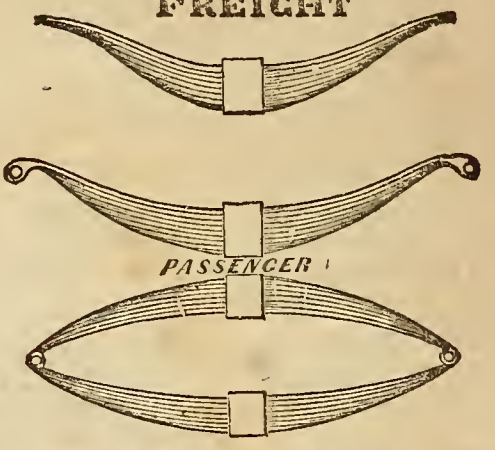
47 West Front Street, Cincinnati.

PERKIN LIVINGSTON & POST

---

RAILWAY SPRINGS.

**FREIGHT**




THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS.

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Cortes St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

**W. M. F. HEWSON,**

## STOCK BROKER,

**No. 21 West Third Street,**

**CINCINNATI.**

Buys and sells Stock, Bonds and oth [illegible] on mission only; negotiates Loans and [illegible]

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by w running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natura Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Centr d West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $2,00 *less than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation. Baltimor*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent. Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 08 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the spective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Buses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo St. Joseph, Jefferson City and all Western Citici.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:0 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent.

W D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A.M.

Terre Haute and Alton train leaves Indianapolis at 8:26 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S

**WROUGHT IRON**

## ARCH BRIDGES

—AND—

## Corrugated Iron Roofs

ARCHED AND FLAT.



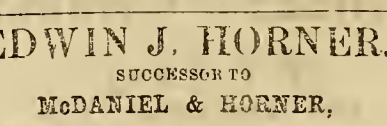
CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

Sept. 2 MOSELEY & CO.
BOSTON, MASS.

## EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



*LOCOMOTIVE & RAILROAD*

## CAR SPRING

MANUFACTURER,

WILMINGTON DELAWARE.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS,

ESTABLISHED 1821.

**MORRIS, TASKER & CO.,**

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!!

## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4 30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.14 P. M. (Express.

On Sundays, 10.24 P. M.

☞Through connections made for all points E Wes

W M. ATKINS, Sup

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. - - - } Editors

CINCINNATI:
THURSDAY, NOVEMBER 7, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

W. A. MUNSELL,
General Agent.


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | *Depart.* | *Arrive.* |
|---|---|---|
| Morning Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 9:10 A. M. |
| Lightning Express | 7:00 P. M. | 4:35 P M. |
| Morrow Accommodation | 5:20 P M. | 8:00 A. M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Express Mail | 9:40 A. M. | 5:30 A. M. |
| Night Express | 10:30 P. M. | 7:30 P M. |

MARIETTA AND CINCINNATI,

| | | |
|---|---|---|
| Mail | 7:40 A. M. | 6:15 P. M. |
| Killsboro Accommodation | 3:40 P. M. | 11:00 A. M. |
| Night Express | 7:15 P. M | 5:00 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Toledo and Detroit | 7:00 A. M. | 9:25 P. M. |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P M. |
| Indianapolis & Cambridge City | 6:00 A M. | 10:05 P. M. |
| " " " | 4:00 P. M. | 12:25 P. M. |
| Toledo, Detroit & Huntsville | 5:00 P. M. | 12:50 P. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M |
| Richmond & Chicago | 6:00 P. M. | 12:25 P. M. |
| Hamilton Accommodation | | 7:55 A. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R.

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 10:05 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:10 P. M. | 12:25 P. M. |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Springfield & St. Jo. Express | 2:00 P. M. | 4:45 P. M. |
| St. Louis and Chicago Express | 5:15 P. M. | 1:30 A. M. |
| Lawrenceburg and Harrison Accommodation | 4:30 P. M. | 8:30 A. M. |
| Harrison Accommodation | 9:25 A. M. | 2:35 P. M. |

OHIO AND MISSISSIPPI.

| | | |
|---|---|---|
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A. M |
| Louisville Special Train | 3:45 P. M, | 1:50 P. M. |
| Louisville, St. Louis and Cairo Express | 7:50 P. M. | 11:00 A. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4:00 P. M. | 7:45 A. M. |

COVINGTON AND LEXINGTON.

| | | |
|---|---|---|
| Morning Express | 6:00 A. M. | 11:06 A. M. |
| Evening Express | 1:50 P. M. | 6:08 P. M. |

### New York,—Its Business and Communications.

NEW YORK, October 30th, 1865.

I was brought here, by the new route over the Steubenville Bridge, which I have already described. New York, like any great city, is one of those museums of natural and artificial curiosities, which to an observer of mankind is ever novel and interesting. *Why*, is the first question of one who loves nature, did such a multitude of human beings ever congregate in such a vast pile of brick and stone, packed up in a sort of prison, and shut out from beautiful fields, and the natural and pleasant employments which those fields afford? there are some good reasons why men consent, and are pleased to live in cities. In the first place, *man* (*homo*) is a gregarious animal, and however proud he may be of his superior reason, is governed largely by his animal instincts. The antelopes,—the bison,—even the savage wolves, gather in large herds, and work together in their common interests. So men congregate together. Again, a city offers all the charms of a great lottery. If there are many who draw blanks, there are many who draw enormous prizes. Look on the Fifth Avenue here; the new streets on Murray Hill; all the good streets in the upper part of the city, and you will find them built up, with what may properly be called palaces. These are the fruits generally of trade; and often also of that gambling in Stocks, which largely distinguishes this city. Some are the results of hard work, others of a miserly economy. But they all give evidence of a wealth, which cannot be so quickly and so largely got in agricultural pursuits. These fortunes generally pass as quickly away; the grand-child being as poor, as his grandfather was rich. But, there are great numbers of such prizes in a city, and they are the glittering baubles, which allure and gratify the vanity of man. But, there is another reason, which just now make great cities much more easy and pleasant to dwell in. This is the *City Railroads*. If a man has business at a point (as thousands have), three miles from where he lives, it becomes inconvenient, to say the least, by any of the old ways of conveyance. Even the "omnibus" does not quite answer the purpose. To multiply omnibuses till they carry one hundred thousand people, would crowd every thoroughfare in a city, to such a degree, that they would become impassable. A rail-car carries three times as many, and takes no more space. The cars in New York do not go below the Astor House, and the consequence is, that from the Park to Wall Street is a perfect jam of vehicles, at times, entirely blocked up. Such would be the case with the whole of Broadway and the leading streets of New York, if the street cars did not relieve them. There are now about *ten* lines of cars on the leading avenues from the lower end to the upper of the city. Three or four of these lines run the entire distance from the City Hall to the Central Park. Thus for (6) six cents each way, a poor workman, who can afford no more, gets a long ride, and a walk in fresh air through that great and beautiful park. "The park," said a lady, "is a great blessing to the poor," and undoubtedly it is, or ought to be. To look upon those palaces, which rise by thousands around us, one would say, there are no poor; but, that would be a great mistake. "The poor ye have always with you," said the Savior of the world; and it is in great cities where you see the most striking evidences of this melancholy fact. There are many poor in the country, but they take not such distressing and appalling forms as in the city. If you choose to look at this aspect of humanity, you will find vice, crime, licentiousness, and hot-bed luxury, all resulting in misery and poverty, pitiable to behold, and almost incalculable in extent; but, still the great whirl of life and business goes on with accumulating force, and rushes remorselessly over the poor, the weak, and the dead.

The *business* of New York is based upon foreign trade, and as a consequence, no city in America is so entirely cosmopolitan. About one-third of its population is Irish, and about one-eighth German; and tens of thousands are French, Spanish, and Italian. It is true, that this immense population, as well as business, is controlled by native Americans; but, even this control is diminishing. Go with me to the very heart of New York, and I will show you whole streets, where you can find scarcely an American name; and even if you do, quite likely, the men will turn out to be English. Still New York is the resort of the enterprizing, adventurous men, who want to make a fortune by trade, whether they come from the East, or the West. The foreign trade, in one sense, is not as great as formerly; because both the tariff and the war have reduced this; but, on the other hand, the coasting trade, the railroad business, and the manufacturing business are all increasing. The reopening of the Southern trade, will have a great influence at New York. The consequences of all these *internal* currents of trade running in here, may be to make New York more of an American city than it has been, and probably will have a decided influence in that way.

In regard to railroad interests, New York is singularly situated. There is but one way (this by the Hudson,) of getting out of New York, on a strictly New York Road; and more important than this, the only way she can go directly West, is through New Jersey and Pennsylvania, whose roads are under their local influences, and in a great measure adverse to those of New York. Philadelphia still controls, and must ever control the main route to the West. The New York Central, and its connections with the Lake Basin, are

under New York control; hut, you have only to look at the relative falling off, in the receipts of the New York Central, to see that the superiority, which for a short time it enjoyed in consequence of being first made, was adventitious, and will soon be confined to the Lake Basin.

The returns of financial operations in New York just now, are demonstrating the tremendous strength of our national resources. Take for example the Custom House receipts. The following are the three quarterly returns, since January 1, 1865.

| | |
|---|---|
| Customs Duties in Gold for quarter ending March 31st | $14 570,639 |
| Ditto, for quarter ending June 30th | 22 507,309 |
| " " " September 30th | 45,443,559 |
| Total, 9 months | $82,521,507 |

You perceive, that the increase of the 2d quarter upon the 1st, was 50 per cent.; and that of the 3d on the 2d, was 100 per cent.! The financial year of the United States ends on the 30th of June, 1866. It is entirely safe to say, that the Customs Revenue of the Government for the current fiscal year will he fully *one hundred and fifty millions of dollars.* If, we suppose the premium of gold to he 40 per cent., then the tariff revenue for the year 1865–6 will he equal to *two hundred and ten millions in national currency.* The Internal Revenue will amount to $350,000,000, and thus the *receipts of the Government for the current year will be over five hundred millions.* Any one can see that, with such a revenue, and a peace establishment, we can pay off the national debt in fifteen years. Why not? Secretary McCullough's threat to redeem the Government currency is much more of bark than bite. Just see, *how* he is doing it. He has taken in $50,000,000 of compound interest notes. Well; that looks like something. But, look to the other side. The National Banks have in a month issued several millions more of notes. Not only that, but Mr. McCullough is now issuing millions of what are called "*gold certificates.*" You say, this is not currency. It is not currency among retail dealers; but it does precisely what all paper money does. It is a substitute for gold in certain large transactions, and that is what it will be. Besides this, the extension of credits, and credit notes and checks, is practically an extension of currency. I am satisfied we shall not have any rapid reduction of currency, nor any material reduction of prices in a long time. And if the *price of labor and of services* is made equal relatively to that of other things, what difference does it make?

M.

---

The coroner's jury in the case of the terrible accident near Lancaster, on the 10th inst., by which nine persons were killed, rendered a verdict that no one was at fault, the train was under moderate headway, everything was in good order, and it is a mystery why the train left the track.

## Pacific Railroad of Missouri.

The earnings of this road for the years ending March 1, 1864 and 1865, have been as follows:

| Main Line— | 1864. | 1865 |
|---|---|---|
| From passengers | $313,790 41 | $453,078 44 |
| " freight | 560,744 59 | 609,099 89 |
| " mails | 28,350 00 | 30 487 50 |
| " rents, &c. | 3 860 95 | 5,127 64 |
| | $906 745 95 | $1.097,793 37 |
| Transportation exp. | 546,161 99 | 886,483 23 |
| Net earnings | $360,583 96 | $211,310 24 |
| South-west Branch— | 1864. | 1865. |
| From passengers | $85,144 15 | $84 025 02 |
| " freight | 160 792 25 | 107 944 44 |
| " mails | 5,614 60 | 5,775 00 |
| | $251.551 00 | $197,774 46 |
| Transportation exp. | 150,8-2 01 | 195,849 47 |
| Net earnings | $100 668 99 | $1,894 99 |
| | 1864. | 1865. |
| Earn'gs of both roads | $1,158,296 95 | $1,295,537 93 |
| Transp. expenses | 697,044 00 | 1,082,332 70 |
| Net earnings | $461,252 95 | $213,205 23 |

EXPENSES OF TRANSPORTATION IN DETAIL.

| | 1864. Main Line. | 1864. S. W. Branch. | 1864. Total. | 1865. Main Line. | 1865. S. W. Branch. | 1865. Total. |
|---|---|---|---|---|---|---|
| Repairs of engines | $44,005 53 | $ 0 250 37 | $51 255 90 | $ 8,259 16 | $17,963 64 | $26,221 80 |
| " cars | 37,302 33 | 12 146 93 | 49 469 26 | 56,324 42 | 14,508 71 | 70,944 13 |
| " road bed | 20,759 98 | 13 903 20 | 34,663 18 | 44 674 7 | 16,123 27 | 60,796 94 |
| " track | 115,032 35 | 38,052 43 | 153,964 78 | 168,584 57 | 43,388 39 | 211,972 95 |
| " bridges | 41,698 59 | 4,729 89 | 46,428 48 | 106,108 35 | 3,225 80 | 109 334 15 |
| " buildings, etc. | 25,147 52 | 1,323 85 | 26 471 57 | 66,968 63 | 7,160 59 | 74,129 22 |
| Fuel consumed | 46,094 37 | 15 880 27 | 62,504 64 | 69 163 97 | 21,993 53 | 91,157 50 |
| Oil and waste | 9,095 11 | 2,274 45 | 11,369 56 | 14,770 66 | 3,234 77 | 18,011 43 |
| General superintendence | 6,610 43 | 2,305 29 | 8,916 23 | 8,686 63 | 2,540 71 | 11,227 34 |
| Agents and clerks | 23,125 84 | 6,477 16 | 29,603 00 | 29,478 53 | 7,558 91 | 37,037 64 |
| Train hands | 65,071 60 | 16,938 57 | 81,799 97 | 83,653 78 | 20,777 86 | 104,431 64 |
| Firemen | 31,933 96 | 2,601 17 | 34,535 93 | 39,613 23 | 4,649 10 | 44,262 89 |
| Watchmen, etc. | 5,802 89 | 2,267 01 | 8,069 90 | 9,210 41 | 2,661 10 | 11,871 56 |
| Handling freight | 19,880 28 | 9,662 57 | 29,542 54 | 21,838 24 | 13,056 70 | 44,885 10 |
| Stationery, etc. | 5,011 98 | 1,398 83 | 7,340 81 | 10,497 59 | 2,559 10 | 13,057 96 |
| Loss and damage | 10,332 51 | 3,687 90 | 14,020 41 | 7,471 44 | 2,500 37 | 9,971 81 |
| All other expenses | 32,238 23 | 9,996 91 | 42,235 14 | 59,761 40 | 9,558 80 | 69,320 20 |
| | $546,161 99 | $150,883 01 | $697,044 00 | $895,453 23 | $195,849 47 | $1,092,332 70 |

The company was incorporated Feb. 12, 1849, and organized Jan. 31, 1850. The surveys were commenced in June, 1850, and the formal breaking of ground took place July 4, 1851. The road was opened to Cheltenham, 4 75 miles from St. Louis, Dec. 23, 1852; to Kirkwood, 13 miles, May 9, 1853; to Franklin, 37 miles, July 20, 1853; to Washington, 54 miles, Feh 11, 1855; to Hermann, 81 miles, Aug. 7, 1854; to Jefferson City, 125 miles, March 13, 1856; to California, 150 miles, May 14, 1858; to Tipton, 163 miles, July 26, 1858; to Syracuse, 168 miles, Aug. 1, 1859; to Otterville, 176 miles, Aug. 24, 1860; to Smithton, 181 50 miles, Nov. 12, 1860; to Sedalia, 189 miles, Feb 1, 1861; to Dresden, 196 miles, May 10, 1863; to Knobnoster, 207.50 miles, May 2, 1864; to Warrensburg, 218 miles, July 3, 1864; and to Kansas City, 283 miles, September 19, 1865.

An act was passed by the General Assembly, and approved Feh. 10, 1864, providing for the extension and completion of the road to Kansas City. This act was accepted by the stockholders on the 7th of March ensuing, and its acceptance filed in the office of the Secretary of State; so that the same has been adopted, and has become part of the legislation of the State for this and other roads. No event, says the report, in the history of this road or the city of St Louis is more pregnant with permanent welfare than this Act of the General Assemhly; and when the road is completed, and a few years shall have passed, its importance will be so patent, that with one accord the wisdom of the legislature will he acknowledged. The two great *ear marks* in the law, are the *one* mortgaging the road from Dresden, in Pettis county, to Kansas City; the *other*, the sacred application of the earnings of the whole road to the payment of interest and principal and debt created hy the mortgage. As the road has since heen completed, it is needless to repeat the arguments used to prove that the bonds issued under its provisions will be promptly paid The act also provided for the classification of the Directors into three divisions, to wit: the first, consisting of four members, to serve until the election of 1864; the second to serve until 1865; and the third, consisting of five members, to serve until 1866; and all annual elections are to be for four or five Directors, to serve for three years. The introduction of this feature into legislation is not unusual, but, on the contrary, it has been the experience of corporations that frequent changes are not attended with advantages; hut among the many reasons advanced, the principal one was, that as tho securities created by the bill itself only operated on an imaginary road, and their negotiation depended on the confidence in the management, and on the proceeds being applied to its extension, a majority of the Directors negotiating these honds should remain in the Board sufficiently long to see the faithful application of the same. The report of the President for the year ending March 1, 1865, says:

During the period of fifteen years of the Company's organization, there has not heen a more eventful year, varied and perplexing as many of them have heen, than the year closing with this Report. Obtaining from the State a partial release from its lien, the securities for its completion having generously heen purchased hy our own people, the ingredients for a completed Road were secured, leaving nothing but grading, masonry, hridges, etc., to be done; all was again quiet in the interior of our State, her people once more at home and contented, with our daily revenues increasing, and all flattering and prosperous, when, almost without warning, our State was once more invaded hy *rebel forces*, who, like an avalanche, came down, destroying with the torch our depots, hridges, water stations, engines, and indeed almost everything perishable; leaving everything a wreck, and destroyed, as if it had been a thing of life. The invasion of Gen. Sterling Price, on the 30th of Septemher, 1864, found the unfinished line alive with lahorers, the Transportation Department never so prosperous, and the most sanguine friends of the Road gratified with its earnings.

We embody the succinct statement made by a Committee of the Board to the St. Louis County Court, showing the localities, loss, and damage sustained from the insane invasion, as well as the general condition of the work and its progress at that time:

In September last, when Price invaded the State, trains were running regularly to Warrensburg—a distance of 218 miles. The track was laid 7½ miles beyond Warrensburg, and the work was making good progress all along the line from where the track layers were engaged, to Independence—the track between Independence and Kansas City having been put down in July last.

The number of men engaged on the work at the date first named, was about eleven hundred, and such was the progress of the work that the Chief Engineer, Mr. McKissock, and the Superintendent of Construction, Mr. Garrison, predicted that we could open the road to Holden by the middle of October, and to Pleasant Hill by the 15th of December. In fact, Mr. Garrison was hopeful of completing the entire road within the first month of the coming year, and all were confident of running trains through to Kansas City early in the spring. But the invaders came, and the destruction of bridges, station houses, water tanks, locomotives and cars followed.

The bridges destroyed were as follows:—Bœuf Creek, 230 feet; Big Berger, 190 feet; Little Berger, 90 feet; Hermann Creek, 110 feet; Cole Creek, 160 feet; Gasconade River, 759 feet; (including a draw); Bailey's Creek, 110 feet; Osage River, 1,122 feet; (including a draw of 180 feet); Moreau Creek, 220 feet; Gray's Creek, 100 feet; Laminc Creek, 163 feet, and two bridges in Jackson county.

The depot buildings, wood sheds, etc., at Franklin, Gray's Summit, South Point, Washington, Miller's Landing, Hermann, Osage, Lookout, California, Syracuse and Otterville, were all burned.

At Franklin they also destroyed a machine shop and engine house, and at different points along the road, nine water stations, including serious damage to all the stationary engines. Four locomotives were broken and seriously damaged, and thirty-nine freight cars destroyed by burning. There are many other items, such as tearing up the track, the burning of cross-ties and wood collected along the road, that go to swell the aggregate of the Company's loss, and we feel justified in saying that the replacing of the property destroyed will at the present prices cost full five hundred thousand dollars. In addition to this, the net earnings of the road before the bridges were destroyed were full fifty thousand dollars per month, and the four months that will be lost before trains can run through again will cost the Company $200,000, making a present loss to the Company of $700,000 to say nothing of the prospective loss resulting from the delay in completing the road.

Early in October the men engaged in construction were all driven off and scattered, and the work west of Warrensburg entirely suspended.

It will be seen from the foregoing that the loss to the Company was estimated at seven hundred thousand dollars, but there can be little, if any doubt, but that it far exceeds that sum in loss of business and delay of a completed road.

To repair the damages sustained would absorb all the resources of the Company, leaving nothing for extension; and although the replacing of bridges, depots, etc., was at once begun, yet it was not until the 18th of February that the trains were operated over a connected road. Our finances exhausted, and the General Assembly powerless to extend further aid, we applied to the St. Louis County Court for a loan of its bonds. On the 18th day of January, 1865, an order was issued, loaning seven hundred thousand dollars to the Company. This amount was paid in bonds of one thousand dollars each, bearing seven per cent. interest, payable semi-annually; they are dated February 1, 1865, and have twenty years to run; both principal and interest payable in the city of New York. The bonds, although loaned and to be paid at maturity by the Company, are plain, ordinary bonds, the Company not being mentioned in the same; but were loaned upon condition that the annual interest should be in monthly instalments paid into the County Treasury, and the bonds at maturity. A part of these bonds have been sold; a number of mortgage construction bonds yet remain undisposed of and in the custody of the fund commissioner.

Your attention is earnestly attracted to the financial condition and future necessities of the company. With a continuous and operated road to Kansas City, there will be little left to furnish the necessary rolling stock; and as in the past, so in the future the Directors of the road must furnish money or credit to pay for the same, to be reimbursed from its future earnings.

We have added, the present year, made at our own shop, two passenger cars, two drovers' cabooses, twenty box, forty flat, and ten stock cars; also, purchased from manufacturers, eighty flat, and fifty box cars; but, during the year fifty-four freight cars were burned by the rebels, and sixteen box and five flat cars were sold to the Government to be used on the southern roads. There have been added four locomotives, and have contracted for sixteen more locomotives, fifty box and eight stock cars, and six passenger coaches, all to be delivered and paid for as the months in this year expire. So necessary is this rolling stock to operate a continuous and completed road, that from past experience it were impossible to furnish transportation either for freight, passenger, or mails with facility and profit.

From the exhibit of the annual earnings, found in the Superintendent's report, it will be seen as follows, viz.:

| | |
|---|---|
| Total earnings for fiscal year..... | $1,295,537 93 |
| Total expenses charged transportation..... | 1,082,332 70 |
| *Net earnings..... | $213,205 23 |

Although there was no continuous road or transportation from the 30th of September to the 20th day of February, yet it will be seen that the earnings of the Main Line were $191,047 52, over those of 1863, while those of the South West Branch fall short $53,806 54. The cost of operating both roads was 83.54 per cent. of the gross earnings.

That the business will greatly increase so soon as we reach Kansas City, requiring a much larger increase of stock, is obvious; for there we meet the "Union Pacific," now extending and being operated through the centre of Kansas to Lawrence, and tributary to our own, to say nothing of the competition we offer competing roads. It becomes important, then, in view of the financial aid devolving on the directors, that those to be elected to-day should be willing to share with those remaining an equal burden.

There have been replaced on the Main Line, during the year, 42,067 cross ties between St. Louis and Gasconade, and, west of that stream, 20,270. Five hundred tons of new rails have been laid in repairs, and about one thousand tons of old rail have been accumulated preparatory to their re-rolling at the East St. Louis Mills, which are to be used in repairs. From the Superintendent's report, the following explains itself:

The number of ties, and the iron replaced, as well as the renewal of the burnt bridges, depots, buildings and water stations, repairs of locomotives damaged, and losses upon wood, ties and fencing, have all been charged among the operating expenses of the road; and this, coupled with the fact that the earnings were for a while almost entirely cut off by the raid, makes the report of operating expenses show a very large percentage of the gross earnings.

As the road progressed, the necessity of the telegraph became more obvious, and an arrangement was made with the telegraph company for an independent line. It is regularly operated to Warrensburg, and all material is on hand for its extension to Kansas City.

### SOUTH-WEST BRANCH.

This was the first that the rebels in their invasion destroyed, and from its earnings above shown it is obvious that no extension of the same could be made unless other sources were found. The road is under the exclusive control of the company, and pursuant to the Act of the General Assembly approved February 10, 1864, with the view of its extension to the Little Piney, negotiations were inaugurated with the late Treasurer of the State, for the sale of the lands and re-investment of their proceeds in the company's bonds, in compliance with the terms of said act; but as trustees of the fund arising from the sale of said lands, created by Act of December 10, 1855, vesting discretionary authority, he could not assent to such investment, and hence the road has not been extended as contemplated. Every effort has been made to induce the Government to extend the road, but without avail; and, unless some new policy by the General Assembly is adopted for the extension and completion, it must remain as it is. Its road bed and rolling stock are in good condition; but until the country in the South-west becomes more quiet, and the people resume their labors, little if any additional business can be expected.

The equipment of the road consists of—42 locomotives, 26 passenger, 8 baggage, 6 mail, 184 box, 20 caboose, 2 wrecking, 1 paymaster's, 1 magazine, 98 stock, and 218 platform cars. Number of miles run, 598,415; do., on the South West Branch, 100,562. Total cost, $232,395 17. Average number of miles run by each engine, 14,248.

### CONDENSED BALANCE SHEET, March 1.

| *Main Line:*— | 1864. | 1865. |
|---|---|---|
| Capital stock..... | $3,493,715 73 | $3,497,085 45 |
| State bonds..... | 7,000,000 00 | 7,000,000 00 |
| Land grant sales..... | 108,963 01 | 111,275 97 |
| " rents..... | 155 40 | 216 90 |
| Total receipts from transp'n, | 5,567,957 77 | 6,645,300 15 |
| Mt. construction bonds..... | ..... | 1,314,000 00 |
| St. Louis Co. bonds..... | ..... | 12,350 00 |
| Bills payable..... | 48,144 80 | 2,120,921 |
| Audited account unpaid.... | 75,908 74 | 408,003 62 |
| | $16,294,845 45 | $19,229,380 70 |
| Construction—East..... | $6,001,870 96 | $6,692,716 87 |
| " West..... | 2,506,122 15 | 4,093,011 53 |
| Rolling stock..... | 761,447 06 | 1,101,970 76 |
| Offic expenses..... | 119,471 56 | 133,635 17 |
| Contingencies..... | 73,026 61 | 75,062 75 |
| Interest account..... | 718,828 88 | 750,241 28 |
| Discount on construction and anticipation bonds... | 8,860 00 | 8,860 00 |
| Commissions on purchases. | 17,375 95 | 17,375 95 |
| Suspended debts..... | 219,148 09 | 213,148 09 |
| Materials on hand..... | 43 935 71 | 139,405 29 |
| Cash in hands of trustee.... | ..... | 21,724 05 |
| Cash in hands of fund commissioner..... | ..... | 3,155 35 |
| Cash in hands of treasurer... | 65,201 77 | ..... |
| Balance undistributed..... | 56 85 | ..... |
| Interest, discount and commissions..... | 1,137,994 03 | 1,141,078 89 |
| Land grant expenses..... | 5,357 77 | 5,362 43 |
| Total transport'n expenses,. | 4,616 148 06 | 5 502,631 29 |
| | $16,294,845 45 | $19,229,380 70 |

| *S. W. Branch:—* | 1864. | 1865. |
|---|---|---|
| Capital stock | $70,513 33 | $70,513 33 |
| Construction bonds | 3,232 000 00 | 5,232,000 00 |
| State bonds | 1,268,000 00 | 1,268,000 00 |
| Sales of land | 20,655 83 | 20,655 83 |
| Rent of Granby mines | 24,328 94 | 24,328 94 |
| Total receipts from transp'n, | 769 869 55 | 950,640 20 |
| | $5,385,307 65 | $5,576,138 30 |
| Construction | $3,098,253 22 | $3,098,939 84 |
| Rolling stock | 116 926 86 | 116 926 86 |
| Office expenses | 34,370 61 | 41,912 61 |
| Commissions on purchases | 2,140 93 | 2,140 93 |
| Contingencies | 24,129 17 | 24,165 92 |
| Interest on bonds | 567,321 94 | 567,321 94 |
| Cash | ..... .. | 31,992 61 |
| Materials | 49,781 56 | ..... |
| Discount and commissions, | 1,028,539 59 | 1,032,765 59 |
| Expense of geological survey, etc | 42,020 22 | 42,309 16 |
| Total transport'n expenses | 421,823 55 | 617,661 84 |
| | $5,385,307 65 | $5,576,138 30 |

*President.*—GEORGE R. TAYLOR.
*Vice-President.*—DANIEL R. GARRISON.
*Secretary and Treasurer.*—J. C. PORTER.
*Chief Engineer and Sup't.*—T. MCKISSOCK.

* All the repairs of the road, new iron in track, as well as the expense of rebuilding bridges, depots, water stations, and in fact repairing the damages sustained by the raid of General Price, are charged to "Operating Expenses," and not to "Construction Account;" hence it follows that the damages being repaired, the same were paid from the net earnings, which explains the increased expense of operating; leaving the net earnings as above stated.

A NEW CAR FOR CARRYING OIL.—We were shown recently, at the boiler yard of W. W. Wallace, on Locust street, in the Ninth ward, a new car, the invention of J. F. Keeler, Esq., for the purpose of transporting bulk oil, which bids fair to become a popular institution when introduced. The car is twenty-five feet in length, by eight in width, and resembles very much in appearance an ordinary box car, with the exception that the bottom or tank is rounded, having the shape of a U. It is constructed of three eighth inch wrought iron plates, firmly riveted together; and well stayed and braced by means of angle irons. The capacity of the tank is eighty barrels. Within two inches of the top plates is a half inch board roof or top, fastened to the braces by means of bolts, which is so firmly joined together as to prevent, when the car is filled and in motion, the surging of the oil, but which permits it to expand, and thus reduces the quantity of gas, which otherwise would be formed. The tank is filled from the top by means of two cast iron pipes, one on each side, and is drawn off from the bottom through two valves, one in each end. The upper portion of the car is of sheet iron, and is intended to be used for the transportation of light packages. The floor of the car rests on sleepers, about an inch in thickness, and is so arranged that the air can pass freely under it in any direction. This will permit the escape of any gases which may penetrate through the iron covering of the tank, and prevent the damage of the goods in the box above. The car will rest on ordinary spring trucks, and when completed will not exceed in weight the box freight cars now in use.—*Pittsburg Chronicle.*

SALE OF RAILROAD IRON.—A Government sale of railroad iron took place at City Point on Wednesday, October 11. The following is a list of the principal buyers, and the prices paid:

The Southside Railroad Company purchased 400 tons at an average of $74 25 per ton. The Seaboard and Roanoke Company bought 400 tons at $79 per ton. The Baltimore and Ohio Railroad Company bought 700 tons at $78 per ton.

[From the New York Post,]

## Agassiz's Expedition.

Profound interest has been excited in scientific and popular circles in this country and in England, by the expedition of Professor Agassiz to Brazil, but in consequence of his aversion to notoriety, and of the severe labors in which the scientific corps under his directon has been engaged, no definite account of his movements, so important to science, has been received in this country. In conversation with the Rev. J. C. Fletcher, who has just returned from South America, we have obtained some interesting particulars of the progress of the expedition, the publication of which, we hope, is no violation of privacy.

On the first of April last Professor Agassiz and his associates left New York in the Pacific Mail Steamship Company's steamer Colorado, and after a pleasant voyage of three weeks reached Rio Janeiro. The Emperor of Brazil, who had been in previous correspondence with Agassiz, no sooner heard of his arrival than he sent a message to him to come to the palace of St. Christopher, where the Professor was received with a warmth of an old friend, the Emperor welcoming him in person with great cordiality, and placing at his disposal every facility for advancing his important mission.

On the 25th of April, when the solar eclipse took place, Agassiz, at the Emperor's invitation, spent the day with him in the observatory of the palace. The conversation of that day caused the Professor to remark that all the previous accounts of the accurate and really abstruse scientific acquirements of the Emperor were confirmed; and he was heard to say that, while it had been his fortune to see many of the monarchs of Europe, the Emperor of Brazil was the first to whom he had felt respect for his attainments and character, as transcending official position. It was not, however, in the scientific point of view alone that Agassiz's admiration was excited; but it was to find in the Emperor the most accurate knowledge of our current literature, and a high moral tone when speaking on such a subject as slavery—a subject in regard to which the Emperor, by his deeds and by his expressions, has left no uncertain sound.

Nor was it only in the Imperial circle that Agassiz found warm and cordial greeting. Every public journal hailed his coming; his rooms were beseiged with Brazilian noblemen, senators, deputies, and other citizens, offering their services. His laboratory (where he and his assistants were engaged in putting up, for the great museum of Cambridge, the innumerable specimens that flowed in from all sides) was also the scene of many visitors, who did not interrupt the important work in hand.

Professor Agassiz was not unknown in Brazil, for it is an interesting fact that before he was of age, Spix, the companion of Von Martins to South America, in 1817–20, having died, Von Martins could find no one in Europe, with the exception of Agassiz, to classify the large collection of Brazilian fishes. The volume in question was the earliest work of Agassiz, and is to-day a standard work on the subject.

Many courtesies from foreigners as well as Brazilians were extended to Agassiz and his wife—the latter especially receiving marked and gratifying attentions. The Swiss residents of Rio Janeiro, on the occasion of the Professor's fifty-ninth birthday, gave him a festival, which is described by Mr. Fletcher as being most enthusiastic. The intertwined flags, shields of Switzerland and America, and the sympathetic speeches of the Swiss, showed that their sympathy had been with our Government during the war. Longfellow's poem "To Agassiz on his Fiftieth Birthday," was read, and produced profound emotion.

These personal attentions, however, did not hinder the great purposes for which the expedition went to Brazil. We have already referred to the vast collection of specimens, many of them new to science. Agassiz had not been a fortnight in the country before he discovered what he confidently predicted before he left the United States; namely, evidence that in some remote period the glaciers, the great ice rivers and moving plains had flowed over the present home of the most tropical nation in the world. In those palm-covered mountains around Rio Janeiro he found erratic boulders and deposits of glaciers as in Switzerland, Norway and Sweden. His last great opponent, Sir Roderick Murchison, has already acknowledged in public that Agassiz was right in his predictions and investigations of glaciers in Great Britain; and geologists, both native and foreign, now in Brazil, have recognized that Agassiz is correct in regard to glaciers in the tropics, though they had failed, as well as St. Hillaire, Dr. Gardiner, and other naturalists, to observe these striking facts until the investigation of the Swiss glaciers pointed out within the tropic of Capricorn unmistakable evidences of the great snow storm which once covered the globe.

Numerous minor discoveries of great importance to scientific men have been made, but the accounts of these will be published in time by Agassiz himself. They will give a clear idea of the vast mineral riches and other resources of Brazil. Perhaps the most important fact in a commercial point of view is his confirmation of the existence in Brazil of coal of the true carboniferous era. Brazil has hitherto received all her coal at great expense from England; but a few years ago Mr. Nathan Plant, an English geologist, found on the South western border of Rio Grande de Sur vast quantities of coal, which has been pronounced by Agassiz, from the fossils which the coal contains, to be of the most valuable quality, destined to add immensely to the riches of the country.

The expedition in June and July divided into several parties, two of which are exploring the interior, while the one under the immediate supervision of Professor Agassiz is now exploring the Amazon and its branches in a steamer placed at the Professor's disposal by the Emperor.

## Telegraph Charges.

Is it not about time that something was done to popularize the telegraph? The prices charged for the use of it are perfectly outrageous. On the continent of Europe one can send a message across the whole breadth of France for a single *franc*, (twenty cents), while the shortest dispatch from Albany to New York costs *fifty* cents. There is no excuse for this. It is the most profitable business in the country. All the lines are making enormous dividends, upon a capital three, five and ten times the cost of the lines. There is no reason why the public should pay such outrageous prices for the service. The cost of working a telegraph is very small, compared with a railroad or anything else, yet the charges in proportion are much higher. This matter is beginning to command a good deal of public attention, and will command more, unless a remedy be speedily applied.—*New York Times.*

### Missouri Railroads.

In his late message to the Legislature, Governor Fletcher, of Missouri, says:

Our railroads occupy the foreground of the picture which reason and experience present of the coming greatness of our State. The completion of the Pacific Railroad to the western line of the State is a subject of sincere congratulation. The business of this road will exceed the most sanguine expectations; and though its earnings are pledged till 1871 to pay advances made for its completion, we may rest assured of the prompt payment after that date of accruing interest on the bonds loaned the road by the State. The State has been liberal in assistance to this great enterprise, and the men who have brought it to a successful issue, by the use of their time and individual credit, made it a first class road, and secured the State, beyond peradventure from ultimate liability for any part of the $7,000,000 of bonds loaned to it, may well be proud of their achievement. But the greater praise is due to the liberal people of St. Louis, whose crowning act of public spirited generosity gave the last loan, without which it could not have been completed.

Speaking of the southwest branch of the Pacific Road, the Governor says it has become the property of the State, as the liability of the State, on account of this road is $4,000,000, with overdue interest say to the first day of January next, amounting to, say $1,350,000. The Governor says that the building of 550 miles in addition to what is built, will connect St. Louis and Galveston, Texas, over a line less than 800 miles in length.

For the construction of our part of this road, about two hundred miles, we have one million and thirty-three thousand acres of land, the value of which, for agricultural purposes, is sufficient to built the road, and the mineral wealth of which is incalculable. There is now completed and in good condition and running order of the road, seventy-six miles from Franklin to Rolla; the cost of which has been $2,552,087. Beyond Rolla twelve miles are graded, and an additional twenty miles partly graded, with two tunnels partly cut; the cost of this unfinished work having been $546,352.

The North Missouri Railroad, so liberally assisted by your last session, has thus far failed negotiate for the money to make the extension to the Iowa line and to build the West Branch and the bridge at St. Charles. You have made the securities they are now offering the best ever put on the market by any road in this State. I have no doubt their value will soon be understood and that the company will be prepared to commence the work at an early day. A prominent feature of the picture heretofore alluded to is the road which shall connect our railway system with that of Iowa, and bring thence a tide of trade and travel to aid in pushing on the extension of our roads to southern connections. The Hannibal & St. Joseph Railroad continues to meet the interest promptly on the $3,000,000 State bonds loaned for its construction.

### UNION PACIFIC RAILROAD.

WASHINGTON, Friday, Nov. 5, 1865.

The Department was to-day preparing to immediately issue United States bonds, amounting to $640,000, to the Union Pacific Railroad Company, Eastern Division, or at the rate of $16,000 per mile, in accordance with the law of Congress, 40 miles of the road having been completed. In addition to this aid by the Government, certain quantities of land are to be given as the surveys proceed and the road progresses.

### Rights of Railroad Passengers.

The rights of passengers on Railways in reference to tickets and baggage, are of such interest that it is well to know the results of some recent decisions in Canadian courts upon the matter. A gentleman traveling on a first-class passenger ticket on the Great Western Railway, from Chatham to Toronto, had a traveling bag which he took with him into the car, not having offered it to be checked, nor having been asked so to do, or give it in charge of any official. At the London station were the train stopped for refreshments, he left it on his seat in the car, in order to retain his seat, and on his return from the refreshment room, it was gone. The Court of Queen's Bench decided that the company was liable for the value of the bag, although it was not checked. The system of checking was introduced for the benefit of the railway companies, and not for that of the passengers.

In another case, a gentleman purchased from the same company, a ticket from Buffalo to Detroit, marked, "good only for twenty days from date." He took the afternoon accommodation train, which ran only as far as London; but he left it at St. Catherines, an intermediate station, and the Agent of the Company refused to let him go on from that place by the night express. It has been decided by the Court of Queen's Bench that the company was justified in this refusal; and that the ticket did not amount to a contract conferring on the holder a right to stop at every or any intermediate station, though within the limited twenty days.

*Per contra*, James T. Jewett recovered $53 from the New York Central Company, at Rochester, last week, for being put off the cars. Mr. J. had stopped over one train, and when he presented his ticket the conductor refused to take it, and demanded pay for the trip.

### Southern Minnesota Railroad.

By Lieut. Gov. Sherwood of Hokah, Minn., one of the Directors of this Railroad, we were informed that the first ten miles of the road is to be pushed to a speedy completion. Three miles of the track are already laid, and nearly two hundred men are employed on the first ten mile division, and with favorable weather it will be completed by the 10th of Novemher. The company have contracted with Clark W. Thompson, who is interested with heavy New York capitalists, for the building of the second division, and arrangements are made to secure the rolling stock, and it is expected that twenty miles of the road will be in operation by the 1st day of January.

So soon as the second division is in running order, the company has perfected the arrangement for a daily line of stages to connect with other roads leading to St. Paul, besides other important points in the southern part of the State. The contracts are being made for the ties, and agents are in pursuit of additional men. The third division will probably be put unde contract some time during the winter.

The road, when completed, will be in every particular a first class road. The rail is of the best quality superior English iron, and of the Erie patent, 52 pounds per yard. The chairs and spikes are also the first qua ity of American iron. As men of capital and large rail road experience are engaged in this enterprise, we may confidently expect at no distant day to see the road brought to its final completion, tapping the two great rivers of the North American continent—the Mississippi and the Missouri.—*La Crosse Republican.*

### Oil and the Government---The Venango District---Revenue Derived in Six Months $1,738,095---Total for the Year will not be less than $3,000,000.

Our reporter, in a recent visit to the oil regions of Pennsylvania, obtained the following interesting statistics (never before published) of the product of oil to the Federal Government:

Returns of Collector of Internal Revenue of Twentieth Pennsylvania Congressional District of Government tax ($1 per barrel) on crude oil, for the months named:

| | |
|---|---|
| April, 1865 | $111,991,050 |
| May, 1865 | 98,394,050 |
| June, 1865 | 412,258,044 |
| July, 1865 | 181,488,055 |
| August, 1865 | 200,000,000 |

REFINED OIL.

| In bond. | gallons. | Am't sold. gallons |
|---|---|---|
| January, 1865 | 278,177 | 80,862½ |
| February, 1865 | 204,655½ | 65,375 |
| March, 1865 | 205,647½ | 61,274½ |
| April, 1865 | 305,447½ | 101,336½ |
| May, 1865 | 543,975½ | 47,278 |
| June, 1865 | 373,717 | 50,133½ |

Total tax on crude and refined oil produced during the above months.....$1,738,095

The total tax will not be less than $3,000,000 for the year 1865—an increase of 500 per cent. on 1864. The population of Venango county—the only portion of Pennsylvania that is really producing any oil—is 30,000 souls. It is estimated that not less than 25,000 wells have been sunk since oil was first disc vered in that county. There are at the present time 5,000 steam engines in the county—*Chicago Republican.*

### Jersey City Locomotive Works.

One of the largest and most imported manufacturing establishment in the country is the Jersey City Locomotive Works, originally projected and operated by a Joint Stock Company, but now leased to Mr James McHenry of London, and which is used to furnish the whole of the motor equipments of the Atlantic and Great Western Railway, beside furnishing the Low Moor wheel tires to other roads. Eight locomotives are completed every month, besides the iron work for 150 cars Everything necessary for constructing a locomotive, from the cowcatcher to the coupling, is made upon the ground. The buildings occupy three entire blocks of ground, which a few years ago was reclaimed from the river. Over 700 hands are employed, and, considering the enormous consumption of locomotives, it is likely to increase in the future. There is every description of lathe and forge and tool for the service. Three hundred tons of iron work, from the raw metal, are finished each month. There are nearly 100,000 separate pieces required for the construction of a locomotive and the cost, which has been as high as $35,000, is now about $20,000. The machinery for welding and fitting locomotive tires is the most complete in this country. The amount of capital invested is over $1,000,000. Mr. McHenry, accompanied by Sir Morton Peto and others interested in the broad gauge roads paid a visit to the works, where they were met by Mayor Cleveland, D. S. Gregory, and other influential citizens. Mr W. G. Hamilton, hte General Manager of the Works, and one of the first mechanics in the country, showed the party over the grounds assisted by Mr. Thomas S. Davis, Superintendent. The visitors were evidently gratified at these evidences of American skill and mechanical ingenuity.

### Common Sense on Railroads.

Why do not our Railway managers protect their own property, if no other, from destruction by sparks from their locomotives? We are confident that the New Haven, for instance, could by a jet of exhausted steam or otherwise, extinguish all the sparks as they emerge from their boiler chimneys, for less than the cost of their late fire at Coscob Bridge. Or, if this be deemed impracticeable, the painting of all railroad bridges and other costly wooden structures with some of the cheap incombustible materials now abundant would be economical in every aspect, and a perfect protection against conflagrations arising from sparks.

But these high, costly drawbridges over the estuaries of streams or other shallow indentations of the coast, are blunders which should be promptly reetified. No railroad should endure a drawbridge, if any bridge at all, which might be avoided by running its track a mile or two further inland. Now that the New-Haven has temporarrily replaced its burned bridge at Coscob, let it at once set to work to avoid that costly, dangerous contrivance for ever more. So with other facilities, and other roads. Too many passengers' lives have already been lost at drawbridges; let their number be forthwith reduced, and every precaution taken against further losses and calamities.—*N. Y. Tribune.*

### The Russian Telegraph Expedition.

The bark Palmetto arrived from Plover Bay September 23. The steamer George S. Wright, with Colonel Bulkley and party, comprising the Russian Telegraph expedition, was at Plover Bay when the Palmetto left. Winter was then fast coming on, with long nights and little sunshine. The exploration developed the fact that the Kinchpeak River is the same as the Yankeeu, navigable for small steamers to English Fort.

Grant Harbor is selected for the landing of the cable on the American side. It is a safe harbor with a hard bottom. There is no timber in that region. The country is rolling but not rough, and the ground thawed to an average depth of ten inches. Colonel Bulkley sounded across Behrings Straits to St. Lawrence Bay. Soundings are favorable all the way across, the bottom being mud and ground. St. Lawrence Bay is not favorable for laying the cable, being sballow and exposed to the south east gales. Michigan Bay was found full of ice. Package Bay presented a good bottom, and seemed suitable for laying the cable. The Asiatic side is more mountainous than the American. It is entirely destitute of timber, and the ground thawed about thirty inches. The Indians on both sides are friendly, and promise to be useful. The Russians had done everything possible to further the enterprise. The steamer with Colonel Bulkley will return to San Francisco in November. Prof. Kennicut, with an exploring party of twelve men; was left at Fort St. Michael, at the mouth of the Kinchpeak. A small propeller was left with him to explore the Yankeen.

---

The organization of the Buffalo & Oil Creek railroad has been completed, and the work of surveying and laying out commenced in earnest. Mayor Fargo, of Buffalo has been chosen President, ahd Mr. Bemus, of Dunkirk, Treasurer and Managing Director. Three parties of engineers, under the charge of Mr. Trew, chief engineer of the road, are already hard at work.

### Brazos Railroad and Telegraph.

The railroad goes on slowly. About seven miles of the track are now laid, and a part of that to-day lies under water, owing to the rain. In time of a flood the track will be swept by water, and the light, sandy soil will be washed off from the ties. It will be necessary to raise the track some four feet on the flat about this point.

A want of rails and ties has been the cause of the slow progress made with the road. A few vessels are now discharging these two articles, and the track will be laid faster.

A shed is being put up near the water as a station house, etc., and the track has two switches; one running to the Commissary store, and the other to the depot shed.

The telegraph is fully up and at work, but the poles so slight, owing to the scarcity of wood in the country, that a storm will blow them down, or a freshet of the river will loosen the soil about them and they will fall down before a puff of wind. The line runs near and along the Rio Grande, so that the damage will be easily remedied.

An office is open for business, and, with the two offices of the express companies, lends an air of business to Brazos.—*Cor. N. Y. Tribune.*

### The Oil Trade.

All the railroads centering to the oil regions carry freight and reap profits that are absolutely enormous. The Oil Creek railroad makes over $200,000 a year on its oil freigbts from Titusville to Corry, a distance of about twenty five miles. Add to this an equal amount for passenger tariff, and the total annual earnings of the road amount to 75 per cent clear profit. The Franklin Branch of the Atlantic and Great Western Railway is showing a card equally good. and with the Oil Creek line contributes to the clear profits of the road almost as much as the whole main line from Cleveland to New York.

The Philadelphia and Erie Railroad, has assumed vast importance and become suddenly rich by the products of the oil trade. The Alleghany Valley Railroad, is getting rich. The receipts by the latter road in this city average 15,000 barrels per week. If the road had vitality enough to push itself to Oil City and Pit Hole, it would pay better clear profit thau any other line of railroad in the country, and add millions to the trade of Pittsburg.

The Pennsylvania Railroad carried over $2,500,000 worth of oil to Philadelphia in September, for which it must have received $50,000, a business worth to it $600,000 a year. The Cleveland and Pittsburg Railroad, since Cleveland has become the depot for the Western oil trade, carries enormous freights, and the road shows by its earnings the importance of the trade. Every railroad that stands between oil and the market, is sure of large profits.—*Pittsburg Oil News.*

---

The Hudson river bridge is to be crossable for trains during the first half of January. The Boston Journal thinks this bridge will bring the granaries of the West one hundred miles nearer to New England, by obviating delay in transhipment at Albany. Some of the Massachusetts roads are building a double track, and projecting wharves at deep water, with suitable elevators to meet the increasing traffic with the West that is anticipated soon to favor them.

### RAILROAD ITEMS.

New York and Albany to be Connected by Railroad on the West Side of the Hudson.—The citizens of Albany, not altogether admiring the idea of being deprived of the position of being the eastern terminus of the New York Central Railroad, or of losing sight of the splendid North River floating palaces that now ply between New York and that city, which changes will be likely to take place as soon as the Schenectady and Athens Railroad is completed, have organized a company to build a road from Albany to Coeymans, which is to connect with the Saratoga and Hudson River Road. The latter road was originally designed to run from Saratoga Springs, connecting at Schenectady with the New York Central, and thence to Athens, which point was intended as the terminus of the steamboat line, including the St. John, Dean Richmond, and all the larger steamboats belonging to the gentlemen principally interested in the railroad, and which boats will probably soon be withdrawn from the Albany line. The road is nearly completed, and it is expected that an excursion train will run over the road early next month. There are roads already constructed, or in process of construction, from New York to Newburg, and a route is being surveyed for a road from Newburg to Catskill. There will then be a hiatus of only six miles between Catskill and Athens, and twelve miles between Coeymans and Albany, to connect New York and Albany by a west side railroad. —*Herald.*

---

The New Iron Railway Bridge at Warehouse Point.—This will be probably the finest Railroad bridge in the United States. It is on the "truss" principle, and of 17 spans, the longest being 177 feet, extending over the river, the carriage road, canal and tow-path. The entire length is 1,525 feet.

The total weight of iron is about 700 tons, and cost £11,231. The plans were designed by Mr James Laurie, and at first tendered to a prominent iron firm in Philadelphia, but at that time nearly all the iron workers in the country were engaged on Government work, and it was finally determined to procure the construction of the bridge in England. The contract was awarded to the celebrated bridge builders, Wm. Fairbairn & Co. of Manchester, but afterward a portion of it was assigned to the London Engineering and Ship Building Company, the builders of the famous Britannia bridge over the Menai Straits. The bridge being built in sections and fitted together, is then taken apart, and shipped to this country.

---

A Philadelphia paper speaks of the rapid increase of business at the depot of the Erie & Pennsylvania Railroad Company:

The magnificent building has very extensive capacity, and although it has not yet begun to be severely taxed, there are, nevertheless, indications that the opening of the road is to realize for this city all the benefits that were expected from it. And yet the trade of this road may be said to be in its infancy. It is by no means developed, and the most important sources of business upon it are local, and from places along the line. The receipts even now are said to be as much as $250,000 per month, a very flattering amount, when it is taken into consideration that the equipment of the road is by no means complete, and that increased accommodations are necessary for the trade which is ready for it.

CHANGE OF RUNNING TIME.—A change of the running time of the trains on the Kentucky Central Railroad went into effect yesterday. Under the new arrangement the morning passenger train leaves Covington at 6 o'clock A M., and the afternoon train at 1:50 P. M. The morning train from Lexington arrives in Covington at 11 A. M., and the afternoon train at 6:30 P. M.

The earnings of the Great Western of Canada were $87,282 for the week ending Oct. 27, against $61,684 for the same week in 1864—increase $25,598.

Col. Wright, of the Military R. R. Bureau, has turned over railroad material of various kinds to Southern companies to the amount of $200,000,000, taking the obligations of the officers in payment.

The Georgia Convention promptly tabled an ordinance to sell the State railroad, and pay the State debt with the proceeds.

Butterfield's overland coaches continue to run on the Smoky Hill route to Denver, unmolested by Indians. Gen. Dodge has distributed troops along that route, making it perfectly secure.

The Mississippi Central Railroad now runs through to New Orleans.

Hitherto all freight by express has been transferred at Cleveland, but a change has now been effected. The Cleveland, Columbus & Cincinnati, the Lake Shore, and the Little Miami Railroad Companies have jointly fitted up in fine style about twenty cars for the American Express, which will run through from Buffalo to Cincinnati without delay in this city.

Arrangements are being made in Boston with the Atlantic and Mississippi Steamship Company by which freight can be billed through to all points on the Ohio and Mississippi rivers.

Mr. James McDonald, Freight Conductor on the New York and Erie Railroad was almost instantly killed on the 26th ult. by falling between two cars, one of which passed over his legs, crushing them badly.

The Philadelphia Press compiles a list of 593 companies owning one or more lines of railways in 1864, with the number of miles in each State, and the cost thereof:

| | Miles. 1860. | 1864. | Total. Cost, 1864. |
|---|---|---|---|
| Pennsylvania | 2,548 | 3,359 | $170,000,000 |
| Ohio | 2,945 | 3,310 | 117,583,000 |
| Illinois | 2,799 | 3,156 | 120,475,000 |
| New York | 2,682 | 2,880 | 135,887,000 |
| Indiana | 2,163 | 2,195 | 71,298,000 |
| Georgia | 1,419 | 1,419 | 29,389,000 |
| Virginia | 1,378 | 1,378 | 42,300,000 |
| Massachusetts | 1,264 | 1,265 | 59,051,000 |
| North Carolina | 938 | 983 | 19,120,000 |
| South Carolina | 973 | 973 | 22,053,000 |

It will be seen that Ohio ranks second in miles, though Illinois is first in the amount invested.

A collision of freight trains occurred on the Nashville & Chattanooga road on the 29th ult., and two engines and fifteen cars were smashed up — no one injured, the employes jumped off in time.

The Dubuque, Iowa, Herald, says the Illinois Central always stops delivering freight when it rains.

The English shareholders of the Great Western Railway of Canada, at a meeting in London, ratified the agreement with the Atlantic & Great Western and Erie and Niagara Railways, for the joint occupancy of the latter line, and the running arrangement between the several parties to the agreement.

The officers and directors of the Cleveland & Toledo Railway, are as follows: President, John Newell; Directors. John Newell, James Mason, T. P Handy, D N Barney, A. H. Barney, Henry Keep, John Gardner, T. H. Hoag, S M. Young; Superintendent, L. D. Rucker; Secretary and Treasurer, H. C. Luce.

Captain Robert Irwin has been re-elected President of the Western Maryland Railroad; John B. Boyle, Esq., Secretary and Treasurer, and P. H. Irwin, Superintendent.

An employe was killed the other day on the Toledo, Wabash and Great Western road near Wabash by being caught by a train while he was on the track. He was unwell and had been to town for some medicine.

The first division of the Racine and Mississippi Railroad was sold on the 18th, by the U. S. Marshal, for payment of first mortgage bonds, and bid off by Mr. G. A Thompson, the general manager of the road, for $1,000,000.

The organization of the Buffalo and Oil Creek Railroad has been completed. Mayor Fargo, of Buffalo is President, and Mr. Benius, of Dunkirk, Treasurer and Managing Director. Three parties of engineers, under the charge of Mr. Trew, chief engineer of the road, are already hard at work.

The *Des Moines Despatch* reports that the Chicago and Northwestern Railroad Company are about to purchase the Decorah Branch Railroad, in Iowa, with a view to extend it northwardly from Decorah in the direction of St. Paul.

The first locomotive made in Iowa, was turned out of the workshop of the Des Moines Valley Railroad at Keokuk last Saturday, and put upon that line—more soon to follow.

An interesting controversy is now going on between Memphis in the center, and Mobile and Cairo at either extremity, of the Mobile & Ohio Railway. The Cairo papers charge the Chamber of Commerce of Memphis with seeking extraordinary advantages at the expense of the northern section of the road, and the Mobile papers charge Memphis with attempting to turn all the business of the southern section of the road into her streets. The contest is an interesting one, and like all other conflicts, will be determined in the direction of the preponderance of energy, activity and power.

MEMPHIS TO NEW ORLEANS.—A gap of only seven miles exists on the Mississippi Central Railroad between Grand Junction and Holly Springs. This break will be completed, and in running order in a few days, which will enable travelers from Memphis to reach New-Orleans in 40 hours.

It is understood that the Morris and Essex and the Catawissa roads have been leased by the Atlantic and Great Western Company, which agrees to make the large expenditure upon them requisite to fit them for business.

IMPROVEMENT IN RAILWAY TRUCKS.—Mr. Samuel C. Hawkins of Suffolk Co., N. Y. proposes to obviate the oscillating motion of cars, so unpleasant to travelers and productive of so many accidents, by the following plan: He employs one or more pairs of supplemental wheels, placed between the ordinary burden wheels of the truck, at an angle of about forty-five degrees, and pressed down by springs, so as to bear against the inner edge of the rail. These supplemental wheels do not sustain any portion of the weight of the car, but in case of the car receiving a lateral inclination, in rounding a curve or from the burden wheels striking an obstacle, this motion is met and checked by the action of the springs. It is claimed by the inventor that, by the use of his plan, not only would lateral motion be almost entirely avoided, but that it would be almost impossible for a car to be thrown from the track by the burden wheels encountering any obstacle.

In London, on the 10th, a goods train was blown two miles through a pneumatic tube in about five minutes. The Duke of Buckingham and several directors of the company were blown through in the same length of time. Additional lengths of tubing are about to be opened. A circular disc or fan twenty-two feet in diameter is made to revolve rapidly by steam power, and can be used either for propelling the laden trains by atmospherie pressure behind them, or by drawing them back through the tube by forming a partial vacuum before them.

The *Richmond Enquirer* says surveys are soon to commence for a road from Alexandria to Rocky Fellows Gap, about six miles from Acquia creek, to connect with the Richmond, Fredericksburg & Potomac Railroad. The following were elected officers of the company on the 24th ult.:

President — F. W. Latham, of New York. Directors—H. G. Fant and L. P. Suit of Richmond; J. B. Stuart and L. Huyck, of Washington; S. M. Shoemaker, of Baltimore; Alexander Hay, of Philadelphia; Gen. Julius Stahl and E D. Hurr, of New York. Secretary—J. B. Stuart. Treasurer—L. Huyck.

At Cornwall Lebanon county, Pa., there is in process of construction a spiral railway around and to the top of the great iron-ore mountain. It starts from the level of the Cornwal railroad, and revolves around the mountain, at some places over trestle work, at others over high embankments, and again at others through ponderous cuts in the solid bodies of iron ore, until it reaches the very top of the mountain. A great part of the way is completed, a great part is ready for the sills, while the rest is progressing actively. A powerful locomotive has been obtained to do the work of moving the trains. When completed, the road will be over two miles in length and unequalled in the world.

The Titusville Herald says the Reno & Pithole Railroad is to be put through with extraordinary dispatch. Maj. Gen. Burnside, is President of the Company, which was chartered as the Mill Creek Railroad Company. The length of the road will be ten and a half miles, and the route from Reno up Shaffer Run to the head of Cornplanter Run; thence down Cornplanter Run to Oil Creek; up Oil Creek to Rouseville; thence up Cherry Run to Plumer, and down Allander Run to Pithole City.

The new organization of the Central Ohio Railroad Company has elected the following Directors: H. J. Jewett, Daniel Applegate, S. R. Hosmer, of Zanesville; John King, Jr., Walter B. Brooks, Joseph H. Rieman, Joseph W. Jenkins and James Harvey, of Baltimore, Md.; Simeon Gebhart, of Dayton; Jno. H. Heaton, of St. Clairsville, Ohio; Wm. Dennison and Jos. R Swan, of Columbus; and Wm. H. Clement, of Cincinnati, Ohio. Officers for the ensuing year: H. J. Jewett, President; Daniel Applegate, Treasurer; Wm. Wing, Secretary, and D. W. Caldwell, Superintendent. 41,250 votes were cast, representing $2,061,500 of stock.

---

The *Chattanooga Gazette* says:

The great bridge that spans the Ogeechee river on the route of the Georgia Central Road is now completed, and cars are passing over it. The iron required for the road bed has been purchased at Chattanooga, and one train load has been received

We learn that Mr. Branner, President, in anticipation of the increased business of the E. T. & Va R. R has purchased six additional elegant engines, five new and superb passenger coaches and ninety box cars.

---

Short Line Railroad. — The work of procuring subscriptions to the Dayton and Cincinnati Short Line Railroad is progressing, and it is confidently expected that the line will be completed during the coming year.

---

The Toronto Globe reports a fatal accident on the Grand Trunk Railroad, on the 29th ult. A freight train ran off the track near Perth station, thirty miles from St. Mary's, and the steam blew off, scalding to death the fireman and a farmer named Palmer. Nothing was found on the track which could have thrown off the train, and it is supposed that the rails or wheels must have been out of order. Misfortunes did not, however, end with the killing of the two men named. Another engine, which had been sent to aid the one which was injured, also ran off the track, and a passenger jumped off the car in order to save himself. In doing so he broke both his legs, and fractured his head fearfully.

---

New Railroad.—The Commercial's Washington letter says a company of gentlemen, mostly of Washington or New York, has been organized to construct a railroad between Alexandria and Fredericksburg, under a charter obtained from Gov. Pierpont's Legislature, when that body was in session at Alexandria. This will be an important connecting link in the travel North and South.

---

A locomotive on the Raleigh & Gaston R. R. exploded on the 28th ult., instantly killing two persons.

---

The citizens of DeRuyter, Madison County have had a large meeting to consider the utility of a railway line between Syracuse and New York or Newburg, and have pledged $300,000 for the completion of such a work.

---

France has won another peaceful industrial victory. The Government of Baden invited proposals for forty-six locomotives. An English contractor offered to make them for 70,720 francs each, those of Carlsruhe for 55,720 francs, but a French establishment carried off the job by an offer for 45,000 francs or about $9,000 each, or about $5,000 less than the English offer.

Carolina Railroads.—The Chicago *Tribune's* correspondent, says that the Railroads in North and South Carolina are in miserable condition. Fare from 5 to 9 cents per mile and speed from 10 to 17 miles per hour. The rolling stock is used up, and the rails worn out, though the roadbed is in fair condition. One train per day each way, is the average, and no attempt at connection is made, each road doing business on its "own personal curve."

---

The Grand Jury of Queens county, N. Y., have indicted R. S. Race, Conductor of the mail train on the Long Island Railroad at the time of the collision near Jamaica, for manslaughter in the fourth degree, and also for causing the death of passengers on his train by negligence. Race gave bail in the sum of $5,000.

---

John J. Burckholder and his family of five or six daughters have been convicted, at Hollidaysburg, for stealing goods from the trains of the Pennsylvania Railroad Company while lying at Altoona. About $18,000 had been thus stolen from time to time, for which the company had paid the owners.

---

The *Petersburg Express* says:

The Manassas Gap Road should extend from Alexandria to Salem, Roanoke county, Virginia. The Virginia Central must be stretched out to the Ohio River. Despite our poverty, these improvements are required.

---

The Baltimore and Ohio Railroad.—From misrepresentations of an opposing line of railroad to the East, the traveling public are led into error relative to the time of leaving Cincinnati and arriving in Baltimore and Washington City, via the Baltimore and Ohio Railroad.

The Baltimore & Ohio Railroad has three prompt connections both East and West, and passengers leaving Cincinnati at 6:00 A. M., reach Baltimore at 10 30, and Washington City at 11:30 next morning. While those leaving Cincinnati at 9:00 A. M., reach Baltimore at 6:00 and Washington at 7:40 next afternoon; Those leaving Cincinnati at 10:00 P M. reach Baltimore at 7:00 A. M. and Washington at 8:45 A. M. The 6:00 A. M. train Saturday morning connects through to Baltimore and Washington. Our fast express leaves Bellair and Parkersburg Sunday afternoon, reaching Baltimore and Washington Monday morning. J. F. Culbertson,
Gen'l Western Agent B. & O. R. R.

---

Mons. Achard, civil engineer, has invented a new method of breaking the car wheels. By touching a small lever, which has the effect of breaking an electric circuit, the breaks are released and forced against the wheels by springs. If the locomotive breaks from the train, or any coupling breaks, the electric wire will also break, and the detached cars will be stopped. The conductor, engineer or any other attendant can instantly release the breaks in case of danger. The invention has been tested at the Government's expense, and it is recommended for the 50,000 francs offered for the best application of the voltaic pile.

---

Kentucky Central Railroad. — The Danville (Kentucky) Advocate is informed that a Cincinnati company are buying up the stock of the Kentucky Central Railroad at par, with the design of immediately pushing the road through to its terminus.

## MONETARY AND COMMERCIAL,

The cholera has been the leading topic for the past week, and people have turned aside from their money-getting, to take precautions lest the fruits of their labor should pass too soon to their legal representatives. Let us thank the terrible scourge for producing a salutary activity in the street commissioners.

There has been no noticeable change in the money market during the week. The foreign news has had a slightly depressing effect on Government securities, and Railway shares have also declined. Provisions are advancing, and packing is now fairly under way, though the price of hogs prevents the houses from running to their capacity.

The Gold market after slight fluctuations, has resumed the average of the past two months. We quote as follows:

| | Buying. | Selling. |
|---|---|---|
| New York | par. | 50@1 10 pr |
| Philadelphia | par. | 50@1-10 pr. |
| Boston | par. | 50@1-10 pr. |
| Gold | 146 | 146½@146¾ |
| Silver | 138@140 | 141@142 |

The Stock quotations are:

| | Mon. A. M. | Tues. P. M. |
|---|---|---|
| U. S. 6 per cent. Bonds, 1881 | 106½ | 106 |
| " 5-20 " old | 102¾ | 102¾ |
| " 5-20 " new | 100½ | 100½ |
| " 10-40 " | 92¾ | 91¾ |
| " One-year Certificates | 97½ | 97¾ |
| 7-30s | 97¾ | 97¾ |
| New York Central | 101 | 98 |
| Erie | 96½ | 94¾ |
| Hudson River | 108½ | 106¾ |
| Reading | 116 | 114¾ |
| Michigan Central | 114½ | 113 |
| Michigan Southern | 81¾ | 76¾ |
| Illinois Central | 137½ | 135 |
| Cleveland & Pittsburg | 99½ | 44¾ |
| Chicago & Northwestern | 33¼ | 3 ¾ |
| " " pref | 66½ | 65¾ |
| Cleveland & Toledo | 105 | 103 |
| Rock Island | 109 | 107½ |
| Pitts., Ft. Wayne & Chicago | 105¾ | 103¾ |
| Ohio & Mississippi Certificates | 31 | 29¾ |

The following are the reported earnings of the Ohio and Mississippi Railroad, from Cincinnati to St. Louis:

| | |
|---|---|
| 1865 | $350,348 63 |
| 1864 | 332,400 07 |
| Increase | 17,947 96 |

The comparative earnings from Jan. 1, to Sept. 30, inclusive, were:

| | |
|---|---|
| 1865 | $2,723 515 87 |
| 1864 | 2,410,877 62 |
| Increase | 312,638 25 |

The receipts for the week ending, Oct. 31, for the Racine and Mississippi and Northern Illinois Railroads were:

| | |
|---|---|
| 1865 | $24,455 50 |
| 1864 | 20,558 60 |
| Increase | $ 3,896 90 |

The New York roads are reducing the wages of labor, and one large corporation has, we understand, cut off $5 per month. At the reduction, labor is abundant.

The New York Central Road earned in October:

| | |
|---|---|
| 1865 | $1,500,000 |
| 1864 | 1,196,435 |
| Increase | $303,565 |

The Michigan Central Road earned in October:

| | |
|---|---|
| 1865 | $490,693 |
| 1854 | 410,802 |
| Increase | $ 70,891 |

The following are the traffic returns of the Milwaukee and Prairie du Chien Road for 1865:

| | 1864. | 1865. |
|---|---|---|
| Jan. 1 to June 30 | $845,879 | $721,676 |
| July | 139,547 | 177,159 |
| August | 113,399 | 170,554 |
| September | 168,218 | 221,025 |
| October | 878,526 | 300,000 |
| November | 149,099 | 250,000* |
| December | 117,013 | 200,000* |
| Total | $1,711,281 | $2,047,414 |

* Estimated.

| | |
|---|---|
| Less expenses as in 1864 | $1,433,180 |
| Interest on Sinking Fund | 204,480 |
| 8 per cent. on Preferred stock | 274,000 |
| Remaining for Common Stock | 135,754 |
| Total | $2,047,414 |

The road was represented Feb. 21, 1865, by the following securities:

| | |
|---|---|
| Bonds | $607,000 |
| First Preferred Stock | 2,773,500 |
| Second Preferred Stock | 1,014,000 |
| Common Stock | 2,988,073 |
| Total | $7,382,573 |

The Sinking Fund, Dec. 31, 1864, was $343,700.

The Michigan Southern Road earned in October:

| | |
|---|---|
| 1865 | $521,636 |
| 1864 | 404,568 |
| Increase | $117,068 |

The Illinois Central Railroad traffic for October, 1865, is as follows:

LAND DEPARTMENT.

| | | |
|---|---|---|
| Sales for the month of October, 1865 | 9,134 58 for | $108,530 68 |
| To which add Town Lot sales | 1,384 98 | |
| Total | 9,134 58 for | $109,915 66 |
| Cash collected | | $209,625 38 |

TRAFFIC DEPARTMENT.

| | |
|---|---|
| Total receipts in month of October, 1865 | $621,848 89 |
| Total receipts in month of October, 1864 | 661,390 96 |

The business of the Great Western Railway of Canada for the week ending November 3 was:

| | |
|---|---|
| 1865 | $80,851 88 |
| 1864 | 59,167 39½ |
| Increase | $21,684 48½ |

The gross receipts of the Erie Railroad in October are estimated at $1,900,000, against $1,222,568 for the corresponding month last year.

The earnings of the Detroit and Milwaukee road for the third week of October show an increase of $15,165 over those of the same week last year, or about fifty per cent.

The earnings of the Detroit and Milwaukee Railroad for the fourth week in October were:

| | |
|---|---|
| 1865 | $44,400 |
| 1864 | 15,829 |
| Increase | $28,751 |

The traffic of the Great Western Railway of Canada for the week ending 27th October, was:

| | |
|---|---|
| 1865 | $87,282 20 |
| 1864 | 61,684 38½ |
| Increase | $25,597 81½ |

The Indianapolis and Cincinnati Road carned in September, 1865, $110,307 44.

The Chicago and Alton Road earned the third week in October:

| | |
|---|---|
| 1865 | $67,943 |
| 1864 | 90,297 |
| Increase | $57,790 |

The Marietta and Cincinnati Road earned the third week in October:

| | |
|---|---|
| 1865 | $27,708 |
| 1864 | 21,369 |
| Increase | $6,339 |

The Grand Trunk earnings, the third week in October, were:

| | |
|---|---|
| 1865 | $147,107 |
| 1864 | 123,270 |
| Increase | $23,837 |

The Michigan Southern Road earned the third week in October:

| | |
|---|---|
| 1865 | $122,601 |
| 1864 | 87,137 |
| Increase | $35,464 |
| Increase since March 1 | $583,570 |

The following are the comparative earnings of the Chicago and Rock Island Railroad for the third week in October:

| | |
|---|---|
| 1865 | $78,363 |
| 1864 | 79,866 |
| Decrease | $1,503 |

The Coal tonnage of the Reading Road this week amounts to the large figure of 88,000 tons.

The following are the earnings of the Racine and Mississippi and Northern Illinois Railroads for the week ending October 21:

| | |
|---|---|
| 1865 | $24,214 |
| 1864 | 12,803 |
| Increase | $11,411 |

A telegram from San Francisco, dated Oct. 28, quotes stocks there as follows: Gould & Curry, bid per foot, $1,125; Savage, bid per foot, $775; Potosi, bid per foot, $370; Ophir, bid per foot, $420; Hale & Norcross, bid per foot, $325; Crown Point, bid per foot, $775; Yellow Jacket, bid per foot, $780; Belcher, bid per foot, $495; Alpha, bid per foot, $1,075; Imperial (per share), bid per foot, $195; Chollar, bid per foot, $385; California Steam Navigation Co., bid per cent., $74; California Steam Telegraph Co., bid per cent., $27.

# RAILROAD OFFICES AND AGENTS.

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A. B. Waters, Freight and Ticket Agent, Cor. Third and Walnut.

**Ohio & Mississippi**

W. E. Bruce, Freight and Ticket Agent, Gazette Building, 52 West Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J. R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg Contracting Agent, Vine St. under Burnett House
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent, ', "

**Central Ohio & Pittsburg, Columbus and Cincinnat**

James E Shields, General Agent, No 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A. J. Day, S. W. Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J. W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burn House.

**New York Central.**

G. B Gibson, S. W. Passenger Agent. W. H. Page Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Ittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent, No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

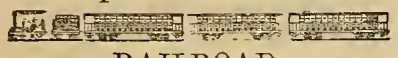
**Covington and Lexington.**

Depot in Covington.

Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

## Indianapolis and Cincinnati



## RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10:00 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt

---

## BENJ. H. LATROBE AND C. H. LATROBE,

## CIVIL ENGINEERS,

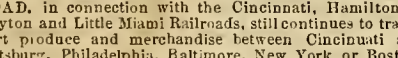
Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also, the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.



Through to Pittsburg without Change.

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

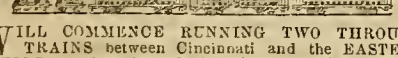
J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

---

Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:20 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.



TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:00 A. M. | 10:40 P. M. |
| HAMILTON..... | 9:57 " | 11:43 " |
| DAYTON..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 8:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, } Passenger Agents.
CHAS. COOK, }

---

## CENTRAL RAILROAD

—OF—

## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

---

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.90; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

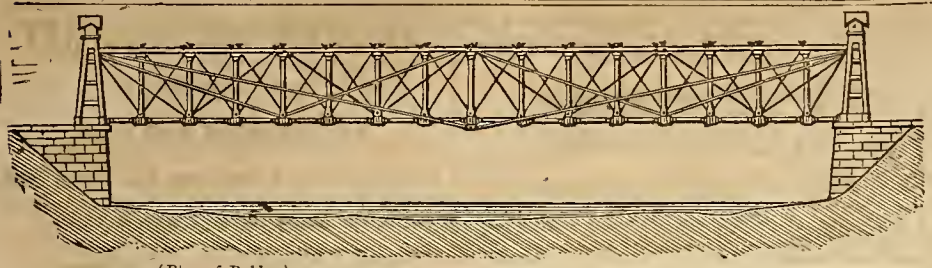
JAMES H. HOYT, Superintendent.

---

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



(*Plan of Bridge.*)

## FINK'S PATENT

## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

## SCREW BOLTS,

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

## LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

## KNOX & SHAIN,

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

## FINDINGS,

AND

## MACHINERY,

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

## Chilled Wheels and Tyres

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

## AMERICAN BANK NOTE COMPANY.

*Bank Note Engravers & Printers.*

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

## SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

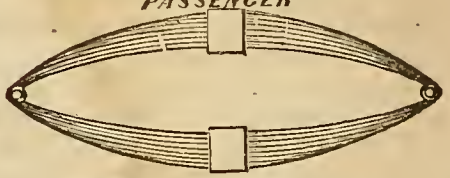
## RAILWAY SPRINGS.

**FREIGHT**





**PASSENGER**



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

**STOCK BROKER,**

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collections.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by nerw unning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will he more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $2,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W P. SMITH. *Master Transportation. Baltimore*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent. Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P M. |
| Mail and Express | 9 40 A M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Aocommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omn buses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

# OHIO & MISSISSIPPI R. R

**Three Trains Daily.**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis. Cairo, St. Joseph Jefferson City und all Western Citici.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo Depart. | Arrive. |
|---|---|
| Mail | 7:20 A. M 8:00 A. M. |
| St. Lonis, Cairo, & Louisville | 7.50 P. M. 11:00 P. M |
| Louisville, Special Train | 3:45 P. M. 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. H FOLLETT, General Ticket Agent.

W. D, GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place unites with Railroads for and from all points in the West and North-west.

# SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield. Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE oefore you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



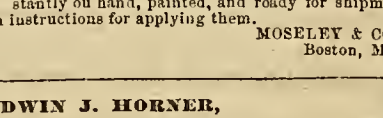
CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

## CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

# FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniatscold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works June9.

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continne to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO.

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅛ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
BY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

**RAILROAD!**



## FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.44 P. M (Express

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, - - } Editors

CINCINNATI:
THURSDAY, NOVEMBER 16, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

W. A. MUNSELL,
*General Agent.*


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | *Depart.* | *Arrive.* |
|---|---|---|
| Morning Express | 6:00 A. M. | 6:30 P. M, |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M |
| Night Express | 10:00 P. M. | 9:00 A. M. |
| Lightning Express | 7:00 P. M. | 4:35 P. M. |
| Morrow Accommodation | 5:20 P. M. | 8:00 A. M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Express Mail | 9:10 A. M. | 5:30 A. M. |
| Night Express | 10:50 P. M. | 7:30 P. M. |

MARIETTA AND CINCINNATI,

| | | |
|---|---|---|
| Mail | 7:40 A. M. | 6:15 P. M. |
| Hillsboro Accommodation | 3:30 P. M. | 11:00 A. M. |
| Night Express | 7:15 P. M. | 5:00 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Toledo and Detroit | 7:00 A. M. | 9:25 P. M. |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M. |
| Indianapolis & Cambridge City | 6:00 A. M. | 10:05 P. M. |
| " " " | 4:00 P. M. | 12:25 P. M. |
| Toledo, Detroit & Huntsville | 5:00 P. M. | 12:50 P. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| Richmond & Chicago | 6:00 P. M. | 12:25 P. M. |
| Hamilton Accommodation | | 7:55 A. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R.

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 10:05 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:10 P. M. | 12:25 P. M. |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Springfield & St. Jo. Express | 2:30 P. M. | 4:45 P. M |
| St. Louis and Chicago Express | 5:15 P. M. | 1:30 A. M. |
| Lawrenceburg and Harrison Accommodation | 4:30 P. M. | 8:30 A. M. |
| Harrison Accommodation | 9:25 A. M. | 2:35 P. M. |

OHIO AND MISSISSIPPI.

| | | |
|---|---|---|
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A. M. |
| Louisville Special Train | 3:45 P. M, | 1:50 P. M. |
| Louisville, St. Louis and Cairo Express | 7:50 P. M. | 11:00 A. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4:00 P. M. | 7:45 A. M. |

COVINGTON AND LEXINGTON.

| | | |
|---|---|---|
| Morning Express | 6:00 A. M. | 11:00 A M. |
| Evening Express | 1:50 P. M. | 6:08 P. M. |

### Another Central Line of Railroad from Cincinnati to New York—The great Competition.

It is well known that when the English Railroad men came to this country, (Peto, McHenry, etc.,) that their idea was to perfect their connection with the Erie Railroad, and thus make a complete broad guage route—1,200 miles in length from New York to St. Louis *via* the Ohio and Mississippi. The public took it for granted this was the case, and speculated accordingly. But it turns out this scheme could not be completed. There are controlling interests in the Erie road, which took a different view of the matter. The consequence is, that the Englishmen who control the Atlantic and Great Western Road, have been obliged to look for another line, which they can control. It is now understood, that the managers of the Great Western have bought the *Morris and Essex* (N. J.) Road; which crosses through New Jersey, by Morristown and Hackettstown; and will connect with the Lehigh and Mahonoy to Mauchchunk, and thence by the Catawissa Road to Williamsport. So far, the route can be easily arranged; but, from Williamsport to a connection with the Great Western, will require about 120 miles of a new road, which it is said will be immediately made. Supposing this to be done, the final result will be, that the Atlantic and Great Western will command an entire line of their own from New York to Cincinnati. It is said to be the intention of the principals in this arrangement to make it a broad guage the whole distance; and thus command a *complete and perfect line of Railroad from New York* to the capital of the Central West, of which they have the *control of the termini.* To all this, it may be asked, *what is the use?* Are there not central lines enough? No—we answer; and perhaps there will be made another. Why? Some explanation of this will perhaps, show some of the practical results, which have been developed by the experience of Railroads in this country. 1. The growth of the West and the increase of surplus products to be carried into the Atlantic States is so rapid, that the great Central Roads have really not been able to do the business offered them. When a Railroad line of 400 miles receives an income of over ten millions of dollars a year, which is the case with the New York Central, the Erie, and the Pennsylvania lines, there is evidently room for another. In five years time, the *increase* of surplus products in the West is fully equal to all that a Railroad line can do. If new lines are not made, one of two things will result, either the surplus produce must seek circuitous lines (which it can do), or the old lines must put *four tracks on their roads,* and, by the way, the Road which first does this will have an immense advantage over its competitors. 2. The first lines of road, East and West, were made on circuitous routes not adapted to the direct trade, between the Central West and the Atlantic. For example, the first complete line between New York and Cincinnati, was made by the New York Central; but, this was a route of nearly 900 miles, when a direct line, if such could be made, does not exceed 520 miles. The New York Central (which made part of the first through line,) was a line nearly double the true line. When, however, we have any two centers of commerce in a country fixed, such as New York and Cincinnati, the *tendency* of all improvements made is to attain that straight line; and we may be perfectly sure, that in the end, that line will be attained. It was perfectly natural, that the first line should be where it was; for New York had a large part of the surplus capital, and New York must have a Railroad to Buffalo, around the Lake Basin. She soon got that, and by connecting Cleveland with Columbus, the first *through* line was made to Cincinnati. But, it was not a line for the Ohio Valley, but a line for the Lake Basin. Then came the Erie Road. This was another New York line, and was made on a line interior to that of the Central; but, it could make no real competition for the West; because it must use the same Lake Shore and Cincinnati lines, which were really under the control of the New York Central. Then came the completion of the Pennsylvania Central, and the Fort Wayne and Chicago line. This *did* make a *competition* (which was the thing wanted), but, only *indirectly;* for it was only by intersecting the Cleveland line at Crestline, and *transferring* on to that line; competition was thus produced, but at great disadvantage. Then came the competition of the Central Ohio and the Marietta Roads, connecting with the Baltimore & Ohio, which made the first real and thorough competition with the New York lines; but this was hardly completed when the War came, and the Baltimore route became comparatively useless, in consequence of the constant incursions of the rebels. Thus it was only till a month ago, when the Pan Handle road, and Bridge over the Ohio was completed, that a real, complete route to New York, not under the perfect control of the New York and Lake Basin interests were made. We have now, for the first time, a real available line, from New York to the Central West, which is not under the control of interests antagonistic to Cincinnati. It is a singular fact, in the history of a great city, that such should be the case. The completion of the great broad guage route from Cincinnati to New York, independent of the New York roads will be another. When the Bridge over the Ohio at Parkersburg, and the Marietta Road are fully completed, there will be another competing line, which in one respect will have a great advantage over the other; that is, that Baltimore is the nearest seat of commerce on tide water. The fact, that it is on a bay does

not make much difference; for that bay is navigable for the largest ships, and Baltimore is in fact a great seaport. We may congratulate Cincinnati in having at last got out of the meshes and toils, by which her railroad interests have been made subservient to those of the Lake Shore, and the Lake Basin. Let the work go on, and Cincinnati will be not only the Queen, but the Metropolitan of the West.

### Correspondence of Railroad Record.

New York, Nov. 9th, 1865.

My Dear Record:—I thought while absent on a flying trip, you would be glad to hear from me, not only as to my whereabouts, but as to how I got there, the character of the route, the conveyances, etc.

The Atlantic and Great Western Railway is an "institution;" this I affirm without fear of contradiction; and although there may be some who do affect to not believe it, yet all I have to say to them is, "try it" and they will *then* be conviuced. One of the principal features of running a long line of railroad, and that which will attract as much attention as anything else, is a due regard to the *commissariat department*; in this most of our roads are sadly deficient. No serious complaint however, can be entered on this subject against the Atlantic route, and although there is great room for improvement on the breakfast, yet *it* even is so much better than can be had at Crestline, that when you think of the comparison, you will be perfectly satisfied. The dinner at Meadville is good enough, and the other two meals at Olean and Port Jervis, were received with good relish, and at proper time.

The route is through a new country, or rather a new country for railroads to traverse, and bears evidence of being rich in agricultural resources, and all the elements that go to make up the local trade of a railroad. You would be astonished to see the wonderful changes that are wrought in a few weeks in the oil region, through which the At. & Great Western passes. Trees are chopped down, and in a few hours afterwards, (and indeed almost before the smoke of the brush is cleared away,) are changed into dwellings, stores, taverns and warehouses; and where a few months ago was a forest, are flourishing towns, where men with pants tucked inside their boots meet in the principal thoroughfares to traffic in stocks, lands and oils, on a scale that would do honor to towns of much greater pretensions, and the long trains of cars loaded with the precious grease, that is destined to "enlighten the world" would do even you good to look at.

The cars, or "coaches" as the company seem to delight to call them, are really "some." The sleeping cars on both the Atlantic and Erie surpass in cleanliness, comfort, luxury and elegance all others that we have seen, and the traveler cannot help feeling that his wants have been cared for, and that he has secured as near as possible while going on his rapid journey as many of the comforts of home as it is possible to be afforded under the circumstances.

We arrived in due time at "the city," and took up appropriate lodgings. In the evening we visited the "Club," and lest you may think that this is something contrary to correct morals, we will remark that there was a large attendance of the *elite* of both sexes present. This is a new and peculiar feature for club rooms. The ladies generally associate the idea of the "club room" with truant husbands and midnight dissipations, that breed unpleasant thought and destroys all their bright pictured hopes of the future. Not so with this, the "Traveler's Club;" it is a sort of home for those wanderers of Earth, who have spent their best years in traversing her wilds in search of pleasure, knowledge, or the hidden treasures with which she so much abounds. Here, in the beautiful and attractive rooms of the club, were assembled such men as Cyrus W. Field, and Professor Morse, and many distinguished *litterateurs*, *savans* and *voyageurs* to listen to a *lecture* by P. M. D. Collins, Esq., on the Overland Telegraph to Europe. It was full of interest and was listened to with very marked attention. The *Herald* gives the following brief sketch of Mr. Collins' remarks:

"He said that between the city of Paris and the city of New York there intervened but thirty-nine miles of water. The remainder of the distance is a practicable land route, possessing unknown and unlimited resources for commerce and boundless treasures for American enterprise. The lecturer gave a rapid sketch of the gradual progress and discoveries made in the realms of science until it culminated in the electric telegraph. He named a few of the numberless benefits conferred on mankind by this omnipotent agent, and compared it to Jupiter Tonans, flashing intelligence from pole to pole. There is an unbroken line of communication between Cape Clear, in Ireland, and the banks of the great Amoor river in Asia, and in the Western hemisphere between New York and Fraser's river in British Columbia. These lines are about fourteen thousand eight hundred miles in length. There still remains a gap to break in the belt of communication around the world, and this is about six thousand five hundred miles. We want to be in daily, nay, hourly, communication with Europe, and stout hearts and stalwart arms are attempting the solution of this problem. To unite the Amoor river in Asia with Fort St. James on Fraser's river in America shall be to complete the circumterranean chain. Then at Calcutta, and London, New York and Paris, Constantinople and San Francisco the same pulsations shall vibrate at the same moment, and the same standard and regulations of commerce shall be adopted in each city. Regarding the practicability of joining those points above mentioned, the most important point to be considered is that not the slightest difficulty exists in the matter of territory, or interference on the part of the United States, Russian or English governments. Those three nations concur in extending every encouragement to the work of girdling the world with a belt of friendship and progress. The dividing line between barbarism and civilization on the American shore of the Pacific is Simpson's river, which empties itself into South Observatory Inlet. From this river to Behring Strait the country is inhabited by Indians, who, however, are quite different from the savages of the Southern prairies. Intercourse with the agents of the Hudson Bay Company has shown these tribes to be more tractable than the rest of the red men. On the Siberian side of the Strait there is but one tribe, the Tchutkis. These are Tartars who were driven to this extreme point of the continent by their more powerful neighbors, and they are uniformly peaceable and kindly disposed towards Europeans and Americans. The wires shall be extended to Behring Strait on either side and a cable laid across this channel, which is only thirty-nine miles wide. Even this distance could be lessened by laying the cable from the shores of either continent to one of the numerous islands intervening. When this project was first started it met with considerable opposition from the Hudson Bay Company, and a similar Russian organization on the other side, but the energy and perseverance of the projector obtained from the Russian and English governments permission to continue his work. The lecturer concluded with an encouraging picture of the progress of the work so far, and the favorable prospects of success."

From such an exhibit, I do not know but that you will conclude with me, and I think that our "lady friends" will also sustain us in our conclusion, that the "Club" is not a bad place to go to, or at least that there are many worse places that men *might* go to in New York. There is no "*bar*" in the house, and men that are fond of that class of amusements do not relish the intellectual feasts that it is the intention of the club to dispense to its members and guests. But lest I weary you, I close. Adieu.

¶

### Albany & Coeymans R. R.

At a meeting of this company at Albany, N. Y., on the 26th ult., the following were elected Directors: E. P. Prentice, B. P. Learned, B. A. Sweet, J. T. Cooper, John Tracey, Franklin Edson, C. B. Lansing, Wm. A. Rice, Lansing Pruyn, Henry Lansing, Pau Cushman, C. V. Baker, W. Frothingham. These are among the most substantial men of the city, and their connection with the enterprise indicates a determination to carry it through.

The Board of Directors was partially organized by the election of John Tracey, Vice-President; Lansing Pruyn, Treasurer, and W. Frothingham, Sec'y.

The road will connect at Coeymans with the Saratoga & Hudson road.

The *Albany Evening Journal* adds:

"We regard this as a very important enterprise. The Saratoga and Hudsou River Railroad was originally designed to run from Saratoga Springs, connecting at Schenectady

with the New York Central, and thence to Athens, which point was intended as the terminus of the steamboat line, including the St. John, Dean Richmond, and all the larger steamboats belonging to the gentlemen principally interested in the railroad, and which boats will probably soon be withdrawn from the Albany line. The road is nearly completed, and it is expected that an excursion train will be run over the road early next month.

There are roads already constructed, or in process of construction, from New York to Newburg, and a route is being surveyed for a road from Newburgh to Catskill. There will then be a hiatus of only six miles between Catskill and Athens and twelve miles between Coeymans and Albany, to connect New York and Albany by a west side railroad.

Our citizens will soon be called upon to sustain this new enterprise and determine, first, whether Albany shall be entirely deprived of the use and enjoyment of what she has been accustomed to call *her* floating palaces. Secondly, whether Albany or Schenectady shall be the terminus of a west side railroad to New York."

Perhaps Troy will consent to allow Albany passengers to partake of the benefits of its extra line of "palaces," now that "the bridge" is rendered useless, or nearly so.

There are already two railways from Albany to New York, and either amply sufficient for the wants of Albany, now that the Central intends to withdraw its patronage. Should another be added, we doubt for the dividends. Until the Hudson and Harlem united, neither road more than paid its expenses.

The principal source of freights will be the Susquehanna road, not yet completed, and the competition for this will be severe, both by river and rail.

### Reduction of Postage to Norway and Sweden by the Prussian Closed Mail.

We are requested to state that the rates of postage upon letters to Norway and Sweden by the Prussian closed mail have been reduced as follows, viz:

To Norway, (if prepaid,) thirty-eight cents per single rate.

To Norway, (if unpaid,) forty-two cents per single rate.

To Sweden, (if prepaid,) thirty-four cents per single rate.

To Sweden, (if unpaid,) thirty-eight cents per single rate.

Postmasters will please note these reduced rates on the table of postages to foreign countries, and levy postage accordingly.—*National Intelligencer.*

The various coal operations in the Lehigh coal district, located on the Beaver Meadow branch of the Lehigh Valley Railroad Company, have been undergoing a working test of their capacity for producing coal. The mines of the Spring Mountain Coal Company produced under this test, in five and a half working days, and shipped to market, 9,037 tons, being the largest yield of any colliery. Those of the Honeybrook Coal Company yielded 8,200 tons, and the other collieries in less quantity, but all in excess of their previous allotment. This region, the Spring Mountain, promises well for a heavy tonnage in 1866.

### Steam Traction Engines on the Plains.

We published in our last an article on the Overland Traction Engine Company of this city, the object of whose organization is the transportation by steam power of trains of wagons across the plains between the Missouri River and the Rocky Mountains, upon the ordinary roads of the country. Since then we have read the report of A. P. Robinson, Esq., who has been engaged this summer in exploring a section of the country immediately south of the Platte River for the purpose of determining the practicability of adopting these engines upon or near the present main line of travel. The points of departure for the transportation to Denver City and its vicinity as well as for the North Platte and the countries west of the Rocky Mountains are: Kansas City, Leavenworth City, Fort Leavenworth, Atchison, St. Joseph, Nebraska City and Omaha. From Kansas City a direct route extends to Denver City *via* Fort Riley and the Smoky Hill Fork, but owing to the difficulties with the Indians and to the absence of Government protection this route has not been used to any considerable extent. From all the points named, however, routes extend to the Platte River centering in the neighborhood of Fort Kearney, from which station one general road is adopted as far as Post Junction, a military Post on the Platte about 85 miles east of Denver. From this post to Denver are two routes, one called the "cut off," forming a chord to the great bend of the Platte, while the other follows the general course of the river.

Between Fort Kearney and Denver City are various fords by which routes diverge to the North Platte, Fort Laramie, Fort Collins, Bridger's Pass, and so on to points west of the mountains. The stages, however, run by way of Denver, and their entire travel is carried from Post Junction, southwest to that city, and thence northward *via* Golden City and Central City to Fort Collins, the whole distance around to the latter point being about 170 miles, while an excellent route exists running direct from Post Junction up the Platte to the mouth of the Cache le Poudre River, and up that stream to the Fort, the whole distance being only about 70 miles. By inspection of the map it will be seen that the distance is less from Nebraska City to Denver City, than from any of the other points named on the south of the Platte River. The direction of the Missouri River is northwest and southeast, and mathematically a point on this river due east of Denver must be nearer to that city than points lower down. By a right line there would be but little difference between Omaha and Nebraska City, but Omaha lies above the mouth of the Platte, and consequently any route from that city must either cross the Platte by a difficult and expensive bridge, or a dangerous ford, or follow its meanderings on the northerly side and cross the Loup Fork, the North Platte and other streams, involving also expensive bridges, or bad fords. Fording is besides at times absolutely impossible. The Platte has no tributaries of consequence on the south side, and during a great portion of the time, there are but two, viz., Salt Creek within about 20 miles of its mouth, and Beaver Creek, about 100 miles from Denver, which have any water in them at all. These are both small streams, easily bridged. The others are merely dry sandy beds crossed without trouble. For a distance of 75 miles west of Nebraska City the present stage route crosses many streams which take their rise near the Platte and run southward; but the divide between their sources and the Platte may be followed, furnishing a nearly level route to Fort Kearney, crossing only one of the streams named (Salt Creek). This is the route of the old California trail, and it is still used to a great extent for heavy loads, although for the great majority of the trains the stage line is adopted on account of the saving of distance. Unlike the process of locating our eastern roads which to avoid undulation must follow the valleys, the engineer on these great prairies, to find level roads must follow these divides.

The country for 75 miles west of Nebraska City is a rolling prairie capable of cultivation, well watered by the various streams running southward, on the immediate banks of which there is a considerable growth of timber. Beyond this the country becomes arid and dry. Timber disappears and no streams are found until the Platte is reached at Nebraska City junction, about 43 miles east of Fort Kearney. It is at this point that the direct stage route and the old California trail join. Following this latter route to this point not a grade exceeding 3 feet per 100 need be encountered, and not a particle of grading is required except upon the first four miles from Nebraska City. For this distance a new road involving a trivial amount of work will be required. The Platte River is a shallow stream varying from a half mile to one mile in width with a quicksand bed, and is full of islands of all shapes and sizes. These have generally more or less timber and bushes upon them, but not a particle of wood is found upon the main land until arriving within 50 miles of Denver City. The river meanders through a bottom of variable width sometimes as great as 20 miles. This bottom is bordered by an undulating ridge called "the bluffs" varying from 50 to 100 feet in height. Back from the bluffs is a dry undulating plain covered with a sparse growth of grass and weeds. The entire descent in the Platte from Denver City to its mouth is about 3,000 feet, (or less than 5 feet per mile) very uniformly distributed. No difficulty is therefore experienced in the selection of a route substantially level except at special points where the ravines are met with, or where the river has washed away the bottom lands and encroached upon the bluffs. These in a few cases as at "O'Fallon's Bluff," and at Fremont's Orchard, are washed down into perpendicular faces of cemented sand more than 100 feet high, and it is necessary to take to the plains south of them.

Indeed for most of the way this higher ground would furnish a magnificent road, the only necessity for adhering to a route nearer the river being for the purpose of obtaining grass and water.

The soil of the bottom lands is an alkaline clay, making a road of the best description, while upon the plains above, it is with a few exceptional points of a cemented material forming the most magnificent natural highway possible. For long distances the route is upon a sort of glacis extending from the bluffs to the bottom lands with just sufficient inclination for drainage. No roads in the world can excel these, and for days they may be followed without an undulation. Throughout the entire route of 650 miles at the present time not an acre of ground is under cultivation, except perhaps for 50 miles at either end. The whole intermediate space is a waste upon which nothing can be raised except on the immediate bottom lands of the Platte, and owing to the dryness of the climate

for eight months of the year, even these lands require irrigation. Capital is therefore required, and although it cannot he doubted that its investment in such improvements would meet with the most profitable return, the difficulties with the Indian tribes which roam this country are such as to deter any one frnm making improvements. From Fort Kearney to Post Junction a distance of nearly 300 miles, the ranches which were built thickly along the route were all with a few exceptions destroyed hy the Indians last winter, and nothing can now he seen except the ruins of their turf walls. In some cases a portion of these have been patched up by some adventurous squatter for the purpose of opening a little stock of groceries and whisky for the supply of the trains, and a very profitable business is carried on.

The road is a great thoroughfare filled from one extreme to the other with a constant succession of ox and mule teams, carrying their own provisions and supplies, and camping when night overtakes them.

They are in trains varying from 5 to 50 wagons, each team consisting of six animals hauling from 2½ to 3 tons.

It is upon this tedious and expensive process that the great region west of this barren district is now dependent for its entire upplies.

Even at the mountains such is the uncertainty of a crop owing to drought and insects, that agriculture is an exceptional employment, and every article of food or clothing must pay not only the enormous tax of fifteen to twenty-five cents per pound for transportation from the Missouri River, hut a profit upon this as a part of the cost and at times an usurious interest for the delays which occur for the want of teams.

The result is a range of prices at Denver City, even for the commonest necessaries of life so exorhitant as to prohihit any successful development of the mining operations, and to preclude hope of any reasonable rcturn for the immense investments which are being made, until more reliable and cheaper and speedier modes of transportation shall he provided.

The railway from Kansas City is only in operation to Lawrence 40 miles. The Omaha route is not yet laid for 30 miles. The rates of progress heretofore made would not lay the rails to the Rocky Mountains in half a century, and no practical railroad contractor will venture to say that it would he practicahle to lay the track upon 600 miles of road in six years, eveu if all graded in advance, through a country destitute of timber for sleepers, and with no possibility of prucuring a particle of the material required for the work of to-day, except over the rails laid yesterday. That it will be built cannot be doubted, hut the popular idea that it can he built in a year or two is absurd.

Not only for the time occupied in the construction of this road are increased facilities necessary, hut when it is constructed tenfold the means will he required to reach the lateral points, which in that period will he developed.

The enormous transportation of the past year involving an expenditure of more than twice the gross income of the Erie Railway cannot wait for the rails.

The road is already graded for the traction engine, and a less *number* of months will put them in operation, than would he required of years to send a locomotive over the route.

The experience so far with traction engines has been just sufficient to show what conditions are necessary to be fulfilled to insure their success.

With an engine of given capacity and an adhesion upon the road sufficient to use all its power, it is as simple a problem to determine the load it will draw, and the fuel it will consume as it is to determine the same results in rhe locomotive engine. Designed to run at a tate of speed less than one-third the locomotives. they can he geared to carry correspondingly greater proportional loads. Their broad wheels to which there is no limit of tread, give ihem no greater weight on the ground than there is in the case of the lightest wagon. The simple difference is the rolling resistance. In the railway a ton of load upon a level straight line may he moved at a speed of five miles per hour, with 10 pounds of power, while upon a level highway of the character of that in question, it requires ten times as much, or 100 pounds. As the grades increasc this proportion would be lessened, so that upon a grade of 1 in 20, or 5 feet per 100, the ton upon the railway, would require 110 pounds, while that upon the highway would require hut 200 pounds, or less than double.

The peculiar features of the Frye engines designed for this route are:

1st.—All the wheels are driving wheels, the whole weight of the engine heing thus available for *adhesion.*

2d.—They are not coupled in any way, hut are entirely independent of each other.

3d.—Each wheel has a douhle engine, there heiog 8 cylinders, so that there are no dead centers.

4th.—The wheels are thus permitted to be corrugated on their tread, so that on a good hard road their adhesion is sufficient to use the entire power.

As ordinarily constructed, only the two rear wheels would be driving wheels. There would be but two cylinders attached to the same driving shaft, consequently its driving wheels must move at the same speed, and cannot he corrugated to avoid slipping.

A comparison of the two engines supposing them to be of same weight and with same cylinder capacity, would he as follows:

Let the engines weigh 32 tons each, the total cylinder area he 600 square inches, and let them he so geared that the speed of the pistons and the speed of the tire of the driving wheels are alike, and let them carry a pressure of 100 pounds steam. The actual power upon the pistons in each engine is therefore 60,000 pounds.

Deducting the power consumed hy the friction of the machinery and the resistance of the hlast, etc., etc., and the balance is the traction power which each engine *should* exert in hauling its load. Supposing 20 per cent. to he lost in this way there would he left 48,000 pounds of traction power, which upon a level hard road should haul a gross load of 480 tons.

Deduct from this the weight of the engine, and its fuel and water for 20 miles, say 54 tons, and 426 tons would he the weight of wagons and load. If one-third of this he wagons, then 284 tons would be the weight of freight which such an engine *should* draw.

In the Frye engine the corrugated wheels as previously described, give adhesion to an unlimited extent, and therefore this is the comparative load it *would* draw. In the other engine its load would depend entirely upon the adhesion of smooth tires upon an earth road. This is found to vary from one-quarter to one-third the insistent weight. Giving it the highest value, aud assuming ⅓ the weight of engine and fuel and water to be on driving wheels, viz, 36 tons, the value of this for traction would he 24,000 pounds, equal to hauling 240 tons of gross load. Deducting the weight of engine and water and fuel, 54 tons, there remains for wagons and freight 186 tons. One third of this heing wagons, 124 tons would he the net load, or 36 tons less than one half the load that the Frye engine would draw. It is in this way that Frye's engine fulfills conditions necessary in a route like that across the plains where fuel can only be obtained at each end.

It must carry full loads of freight west, and hring coal east. It must therefore have capacity to haul a load eqnal to the amount of coal it would require for the round trip.

No engine yet designed, except Frye's, has shown the elements necessary for such a performance, and hence, although they have answered a purpose in a small way, they have never yet heen placed on long routes. Nor has such a route heretofore presented itself.

Here is one, not only requiring these certain conditions to he fulfilled, but offering a reward to him who accomplishes the task almost heyoud computation. Steam will show the same results here that it has always shown in comparison with animal power, no matter to what purpose it has been applied. Even in the smallest as well as the most herculean tasks, it performs the service cheaper, quicker, and with more certainty.

### Huron and Lake Ontario Ship Canal.

This is one of most important enterprises now in agitation. It will only he about one hundred miles in length, and will be fed both ways from its center by Lake Simcoe, the waters of which will he ample at all times to supply the demand. The President of the Company, M. Frederick C. Caproal, of Canada, says, when the canal is completed, it will present seventy miles of length without lockage. The principal obstacle to overcome is a ridge some seveoteen miles back of Toronto. Here is required a cut of about ten miles, the decpest portion of which will he ahout two hundred feet; hut the average will be ahout ninety feet, according to the surveys. This ridge is now heing hored for the purpose of ascertaining the nature of the deposit, and the investigations so far are very favorable. The sum required to construct this canal is $40,000,000, and the company is anxious to secure a grant of land from the Canadian authorities to defray the costs. They also design applying to the Legislature of Michigan, Illinois, Wisconsin and other Western States, which will he benefitted by this work, for similar assistance. This Canal, when finished, will, no doubt, pour into Lake Ontario a large portion of the products of the West, and tend to cheapeu the high freights that arc now demanded hy the various lines of railroads. A meeting of some Canadian men of enterprise, among whom was Mr. R. J. Reekie, the contractor of Victoria Bridge, was held at the St. Nicholas Hotel this morning, in reference to this project, and the feasibility of the undertaking was fully endorsed. — *New York Herald.*

The Great Falls and South Berwick Branch Railroad will he sold hy auction at Portsmouth, N. H., on the 4th of December. The track extends from the termination of the Great Falls and Conway Railroad in Somersworth, and through Somersworth and Rollinsford, in New Hampshire, and Berwick and South Berwick, in Maine, to the Portland, Saco and Portsmouth Railroad.

### The "Corner" in Prairie du Chien.

(From the New York Post.)

Wall Street has lately been roused from its normal quiet by an operation which has cast far into the shade the far-famed Harlem "corner." The stock of the Milwaukee & Prairie du Chien Railway has risen from 65 to 250, and quite a number of "short" contracts still remain uncovered. Much over a million dollars has been made and lost in this stock within a week, and it is possible that before the outstanding contracts are settled, another million dollars will change hands. Let us tell the story in detail.

First, as to the stock concerned. The railroad from Milwaukee, Wisconsin, to the Mississippi, one hundred and ninety-two miles, with a branch from Milton to Monroe, forty-two miles, in all two hundred and thirty-four miles, was completed in 1857 by the Mississippi & Milwaukee Railroad, at a cost of about $8,100,000, say $34,800 per mile, not an exorbitant price. Unfortunately for the company, the crisis of 1857, and the short crops of 1857 and 1858, prostrated the western country, the Mississippi & Milwaukee Company could not pay the interest on its bonds, they were duly foreclosed, and the property passed into the hands of the Milwaukee and Prairie du Chien Railway Company, a corporation born of the ashes of the defunct concern. The new company was organized with an aggregate capital of about $7,200,000. It enjoyed the rare advantage of being well manoged. It participated in the general development of the western country. Its earnings thus grew from an average of a million, prior to 1860, to $1,700,000 in 1864, and to nearly $2,000,000 in the current year—say 27 per cent. gross on the capital represented.

Under the articles of organization of the Milwaukee & Prairie du Chien Railway, the common stock could receive no dividends so long as the concern owed any funded debt. Hence its value was always a matter of uncertainty. At the time the business of the company began to revive, after the reorganization, 20 was considered a fair price; in the full heat of the speculation of 1864, 90 was bid for 10,000 shares; and again, in the depression of the early months of 1865, it was offered at 29. At the beginning of October, 1865, it was selling at 60@65.

At this time it was apparent that within a short period, six or twelve months at most, the whole funded debt, amounting to less than half a million, would be paid off or converted into stock, and that the stock would, within six or twelve months, become dividend bearing. The prospect led, on the one hand, to considerable purchases, and on the other to some lively speculation for the fall. There are speculators in Wall street who are prepared to bet against anything. There were many who were willing to take the odds against there being any dividend on Prairie du Chien during the year 1866. These operators derived comfort from consultations with the Directors of the Board, who having no interest in the common stock, and being exclusively concerned for the preferred stock and mortgage bonds, were quite prepared to pledge themselves that the common stockholders should not receive a dollar until, first, the debt had been extinguished; secondly, the preferred stock had been reduced, and thirdly, the road and equipment had been brought into a high condition of repair and completeness. With such assurances the regular bears of Wall street began to sell freely the common stock of the Prairie du Chien for future delivery.

At this stage in the proceedings speculators interested in other roads began to put a finger in the pie. The great railway companies, the Chicago & Northwestern, and the Milwaukee & St. Paul, are largely interested in the Prairie du Chien. Either of the two would make money by buying it out, if they could get it at its nominal cost, that is, at par for all securities. The Chicago & Northwestern could afford to pay 150 for all the stock and bonds of the Prairie du Chien, if they could be sure of securing the whole. To what extent these companies took part in the "corner" we are about to describe, cannot yet be ascertained. But it may fairly be presumed that one or the other of them was at the bottom of the operation.

Suffice it, for the purposes of the present narrative, to say that between 40 and 70 the whole, or very nearly the whole—some persons say much more than the whole—of the common stock of the Prairie du Chien was bought by somebody. The purchases were made quietly, and the stock was freely lent out to any one who wanted to borrow it. Nay more, stock was tendered to parties who were supposed to be anxious to sell it for the fall; thus, when the price was 70 to 75, a large short interest had been created, and those in the secret had the satisfaction of holding not only all or nearly all the stock, but, besides, contracts for the delivery of several thousand shares which did not exist.

About the 1st of November the "corner" culminated. The stock rose suddenly from 70 to 80, next day from 80 to 90, next day from 90 to 100, next day from 100 to 200, next day from 200 to 250. Persons who had sold the stock short, and whose contracts were maturing; persons who had borrowed the stock for future delivery; persons who in any way or shape had rendered themselves responsible for the stock—were suddenly and startlingly brought face to face with the facts. The development was especially hard on commission brokers. A commission broker is considered to do a safe business when he exacts 25 per cent. from his customers. But when a stock rises 100 per cent. in a day, a margin of 25 per cent. is not much protection. During the first week of November quite a number of commission brokers were forced to settle with the party which had cornered the stock at a loss of from one hundred to one hundred and fifty per cent., and others who declined to settle were forced to put up in the Trust companies such sums as actually impaired their capital. Two prominent houses were so weakened as to be compelled to suspend payment. On one hundred shares of stock sold short at 75 to 77 per cent., the loss at the present time is $125,000, on one thousand shares; and quite a number of speculators took a line of that amount—the loss is $125,000. It was confidently expected on the 5th that the "corner" would collapse within three days. But like the Harlem and Hudson corners, it shows no signs of relaxing as yet.

There is no earthly reason, under the circumstances, why Prairie du Chien should not be put up to 500 per cent. And if the short contracts are reduced or strengthened, so as to diminish the chances of failure on the part of the bears, the price will probably go to that figure. If, on the other hand, the shorts have generally covered their contracts, or if their condition is such that a further advance in the price would merely lead to more failures, it may be assumed that we have seen the highest figures.

### Railway Work for the Season.

The near approach of cold weather, with its minglings of rain, snow and frost, ought to stir up the track men to their best efforts in putting everything in their department in first rate order. Every sleeper and chair should be examined, and every inequality in the track reduced. Tamping up should be performed with even greater care than ever, and every effort made to give greater firmness to the superstructure. Drainage, likewise, is a matter of the first moment; the washings of the side drains should be cleared out, so as to give the water free flow, and washy embankments properly secured so as to prevent filling up. If this work is not already done, now is the time to take hold of it in earnest. The winter season is very trying, not only to the track, but to the rolling stock, and the best way to economise in both track and rolling stock, is to have the track put in good condition. A large per centage of the repair expenses comes from a neglect in this matter, and managers who find their engine and car repair expenses mounting up beyond the usual figures, may safely apprehend that the reason is, the bad condition of the track. Two roads that we have examined recently, and which are generally managed with great intelligence and care, show the best evidence of care in these particulars. Every defective tie, rail, or chair has been removed, the spikes all driven home, the rails all brought in plane, the drainage perfected, the depot buildings and platforms put in first rate order, and everything put in condition to go through the winter's operations economically and safely, and at the same time save any undue amount of repairs in weather unpropitious to thoroughness and economy. This is an example that should be followed throughout the country. Other roads that we have had occasion to examine, not only by riding in the cars, but by walking many miles on the track, show quite a different state of things. A great many important requisites for economy and safety were found unheeded. Loose chairs, spikes loose, and some of them jumped from the chair and tie; the road-bed very uneven, some of the sleepers rotten and split at the rail ends, and some driven into the bed so that the drivers were expending their weight and momentum in hammering down the rails to mere cinder and slag. It would be invidious, perhaps, to mention the names of these roads, but we are very confident that our annual tables of the "result of operations per mile" will sufficiently indicate them hereafter. There can be no excuse for such neglect, though there may be some reasons for it. The first reason may be, that the managers do not sufficiently appreciate the importance of securing an even and firm track; and another may be, that the track repairs are confided to men who lack the requisite intelligence and skill. The temptation to hire men cheap floods the track with a class of men who may know enough to shovel gravel, but who do not profess skill enough to restore a broken-down track to line and plane in such a way as to insure its stability. One of the greatest troubles in our railway management is this tendency to hire cheap labor, rather than that endowed with intelligence and directed by skill. It looks a little like economy to save a dollar or two per week per hand, but nothing is more delusive. Procure good men who know how to do well what you want done, and pay them well for their services, and that in the long run is true economy. If such men have the care of the track, you will not only have a better track, but it will cost less.—*Am. Railway Times.*

### Colorada and Clear Creek Railroad.

We have had an opportunity recently of learning some facts in regard to the survey by Messrs. Mersereau & Reynolds, engineers of the route for a railroad between Black Hawk and Golden City, which may be of interest to our readers, which prove that it is altogether feasible and that its construction will not exceed a price on which the business of the road even for this short distance, will not afford a fair interest on the capital required.

The entire distance, as per the survey from Golden City to Black Hawk Point, near the post office, is 19 21 miles, which is about three miles less than it was generally supposed, and requires three tunnels amounting in the aggregate to 2,425 feet, and four bridges, the total length of which is 280 feet, the sections divided as follows:

From Golden City there is a grade of 82 feet per mile for 1½ miles, where the first tunnel is reached, which is to be 950 feet in length. The next plane of two miles is at a grade of 105 feet to the mile, and is followed by one of 5¾ miles at a grade of 122 feet per mile. On this plane there are two tunnels about one fourth of a mile apart one of 925 feet and the other 550 feet in length. For about two miles of this plane the elevation of the road bed is from 50 to 100 feet above the creek level, making that portion of the route, including the two tunnels, by far the most expensive portion of the road. After passing the last tunnel on the same plane the grade line is about 20 feet above the level of the creek.

Two and one fourth miles from the last tunnel the creek is bridged twice, each bridge 100 feet span, to avoid the construction of a tunnel 600 feet in length. The bridges are to be 20 feet above the creek, and the grade only 68 feet per mile. For the distance of two miles, from the point of crossing the creek, the cost of construction will be comparatively light, but there is heavy work from thence one-fourth of a mile to the junction of north and south forks of Clear Creek. The total distance from Golden City to this point is eleven miles and four fifths of a mile.

At the junction the north fork is crossed by a bridge of 40 feet span, at an elevation of 35 feet above the creek, commencing a grade of 153 feet per mile for a plane of 682 miles in length; thence running on the west bank of the north fork a distance of 2¾ miles, where the line crosses the creek on a bridge of 40 feet span and 40 feet above the creek bed, the grade line there being from 35 to 40 feet above the creek to 1¾ miles beyond the last bridge, where it reaches the creek bottom; thence along the creek bottom to Black Hack-Point, a distance of 3¼ miles.

The maximum grade per mile on South Clear creek is 120 feet; the maximum grade on North Fork is 150 feet per mile.

All the material for the structure of the road bed ready for the iron, is found at the line of the road in abundance and of good quality, and at the present extraordinary high price of labor the whole construction, including iron, depots, engine houses, etc., can be made for a sum not to exceed $100,000 per mile.—*Colorado Miners' Register, October* 17.

---

A Missouri railroad has adopted the system of making each passenger pay to the conductor one cent on account of the Government tax. The St. Louis Democrat presumes that no one will begrudge that amount, as it goes to pay the national debt!

### Minnesota Railroads.

ST. PAUL AND SUPERIOR RAILROAD.

There are now about two hundred men at work on the road, and the line is nearly graded —with the exception of the deep cut near St. Paul, and the filling at or near the levee on the river—continuously from St. Paul to a point near Forest Lake, and within a short distance of Wyoming, and about twenty five miles from St. Paul. A part of the work has been heavy, and owing to the low and flat character of the country over which a part of the line passes, the bed of the road has been raised from two to four feet, and the character of the work reflects great credit on G. A. Johnson, Esq, the chief engineer of the company, and the parties having it in charge.

After leaving a few miles of this end of the line, and the uneven country between St. Paul and White Bear Lake, the line of the road is nearly straight and the grade remarkably easy, and this we understand is the case over the entire line to the St. Louis river, a distance of one hundred and thirty-three miles from St. Paul and to the waters of Lake Superior.

Messrs. Banning and Branch and the other gentlemen connected with the road, who have kept all their pledges to the public, and whose efforts have been crowned with singular sucess, confidently predict that they can have the cars running to White Bear Lake early next season, thus securing the sale of the bonds of the company, when they will grade the entire line through to the waters of the lake, and have the road completed and equipped in from two to three years.

ST. PAUL AND PACIFIC RAILROAD.

On the route to St. Cloud and beyond, the St. Paul and Pacific railroad is running cars to Elk River, a distance of forty miles north of St. Paul. Iron for ten additional miles is on its way here and will be laid this fall.

On the main line extending west from Minneapolis, seven miles have been graded, and the company expect to have twenty miles ready for the iron by the 1st of June next Iron will be brought up early in the season, and the track laying will then be commenced.

ST. PAUL AND WINONA RAILROAD.

Capital has been secured for building this road, and work on it is rapidly progressing. The route was surveyed some time since, and found to be very practicable. Grading has been commenced fifteen miles below St. Paul, and is progressing towards the city. Two or three miles are already completed, and between one and two hundred men are constantly employed (and more are wanted) upon the work.

MINNESOTA VALLEY RAILROAD.

This line extends from St. Paul to Mankota and beyond, toward Sioux City, where it is to connect with the Union Pacific railroad. The track is laid from Mendota to within three miles of Shakopee, a distance of twenty-three miles, and will be completed to that point this week. Passenger trains will commence running immediately, making two trips daily. The line from Mendota to St. Paul will be built early next season to the foot of the bridge in West St. Paul, and in the meantime the distance (six miles) is traversed by steamboats and omnibuses.

MINNESOTA CENTRAL.

The progress of this road since the present company took hold of the work, has been rapid. It is now completed, and passenger and freight trains are running from Minneapolis to Faribault, a distance of fifty-six miles. The connection with St. Paul is at Mendota, and is the same as that with the Valley road.

Next season the work will be again pushed forward, and connection made with the Winona & St. Peter railroad at Owatonna and as rapidly as possible the road will be extended to the Iowa line, where it will connect with the Prarie du Chien road for McGregor and Chicago, and the Cedar Falls road and its connections for St. Louis. Though this road has been open for business but a few weeks, it is already taxed to its utmost capacity to transact the local trade, and a rapid increase of its facilities is being made.

WINONA AND ST. PETER RAILROAD.

For about a year cars have been running on this line from Winona to Rochester, a distance of fifty miles, and a very large business has been done. This season the track has been graded fifteen miles further to Mantorville, Dodge County, and the iron is now being laid upon it. The track is already laid three or four miles beyond Rochester, and will reach Mantorville next month.

This will reduce the gap between the Winona & St. Peter and Central roads to a little more than thirty miles. The stage ride necessary to reach the East this winter, will consist of this gap, and forty miles from Winona to La Crosse.

HUDSON AND TOMAH RAILROAD.

There is now a fair prospect for the early completion of this road. It extends from Hudson, Wis., to Tomah on the Milwaukee and St. Paul railway, and will ultimately be extended from Hudson to this city. When this is accomplished, it will afford us a very direct outlet to the East. A company of capitalists have taken hold of the enterprise, and grading will be commenced at both ends of the line early in the spring.

RECAPITULATION.

The following table shows the number of miles of railroad which are actually completed in this state:

| | Miles. |
|---|---|
| St. Paul and Pacific | 40 |
| Minnesota Central | 56 |
| Minnesota Valley | 20 |
| Winona & St. Peter | 54 |
| Total | 170 |

Nearly twenty-five miles more will be completed this fall, and it is a moderate calculation to state that the cars will be running on three hundred miles of Minesota road by next fall.

In addition to the above given by the St. Paul *Press*, is the Minnesota Southern Railroad, laid out from La Crescent westerly, the first twenty miles of which it is intended will be in operation by the first of January next. Five miles of track are already laid, and two-hundred men are at work grading and laying the track.—*Western R. R. Gazette.*

---

### The Eaton and Hamilton Railroad.

About two years ago representatives from each class of creditors and stockholders of the Eaton & Hamilton Railroad Company were chosen to agree upon a plan for reducing and capitalizing the liabilities of, and reorganizing the Company, under the laws of Ohio. Hon. Thomas H. Weasner, President of Council, was selected to represent the city, he having been, since 1849, one of the Directors of the Company, on the part of the city, under a conditional decree for the sale of the road, &c., made in the case of Varnum and others, trustees, against the Company and others, in July, 1849.

This convention have reported a plan of capitalization, &c., as follows: That the com-

pany issue $560,000 in 7 per cent bonds payable thirty years after date, secured by mortgage on the entire road property, and franchises of the company, with which bonds the company's debts shall be paid, giving to the city $150,000 of the bonds.

We understand, the requisite majority of the several interests, except the city of Cincinati, have ratified this agreement. At the last meeting of Council, President Weasner reported the agreement to that body, and recommended its ratification, or the city's claim to such parties in interest as would carry out the scheme of capitalization. This report was laid on the table and ordered to be printed, together with the argument of capitalization, &c. This $150,000 is perhaps, all that remains to the city of the $1,000,000 advanced by her to different railroads some years ago. It is conceded, we believe, by all having knowledge of the facts, that the Eaton & Hamilton Railroad Company has always acted in entire good faith toward the city, and that the management of the road has been efficient, honest and economical. The simple truth is, the company has had a greater load of debt than she could carry in the adverse circumstances which hitherto she has labored under. By the proposed arrangement the company will be relieved of between $400,000 and $500,000 of her present indebtedness. We are confident, beyond any doubt, of the liability of the company in the better position she will acquire by the proposed capitalization and reorganization, to pay, promptly, the interest on this proposed new issue of bonds and to redeem them at maturity. We think the city should assent to the proposed agreement and let the scheme of capitalization be carried into effect. It would, in our judgment, evince a lack of liberality and of magnanimity not to do so. Ultimately the city will lose nothing by the arrangement. She gets, in the new bonds, the principal of her present debt and $1,500 a year more interest than she is now getting, which, before the maturity of the bonds, will return to her the amount of capitalized interest, she, for the time being, relinquishes.—*Cin. Gazette.*

### German Railroads.

An American traveler in Germany writes to the New York Commercial Advertiser from Bremen, and gives the following as to railroads:

In Bremenhaven, whence a railroad took us to Bremen, we got reinitiated in the delays of journeys, through official inteference, though the restaurant at the railroad made money by it. We were detained unnecessarily about five or six hours—equal to the loss of several dollars to the passengers. Once on the road we had leisure to see how excellent the German railroads are and how slowly they pass over them. The rails are smooth and straight, and not bent as with us, by a poorly constructed and uneven railroad track; the joints are well held together by fastenings, and never bushy or bent at the ends. The ballast of the road is everywhere in complete order and flush up on the outer side of the rail and level with the ties, only just covering them in the middle. The track itself, neatly graveled, is kept clean of grass, including several feet beyond the rails, and the roads are, considering the drought, very free from dust. The culverts and bridges are of the highest class, and our railroads, even the very best, are a disgrace, compared with them in this particular. The same is true as to depots and their surroundings. It is clear, that European railroad engineers would condemn every railroad in the United States as unsafe, for according to their standard, we have really no railroads. The more I examine and inquire, and the more I become acquainted with the details, the more I feel ashamed as an American railroad man. The trouble is, that our railroads are managed and handled by persons technically unacquainted with the business, never educated in the knowledge necessary for their management, and, what is worse, determined not to learn the real requirements.

We build our roads slipshod, we repair them slipshod, and we run them slipshod, and when I look over the men in the United States who are the presidents and superintendents of our railroads, and reflect what they were formerly and what they are now, I see very plainly the source of all this bad constructing, pitiful repairing, and slovenly running of our roads. The head officers did not understand their business originally, and they never learned it properly, and they don't understand it now. I no longer wonder at accidents, for the marvel is that any train arrives safely.

These reflections include equipment. In fact, I may say, that all kinds of equipment are too heavily built here; generally the cars are measured to carry one and a half tons freight for one ton weight of car. It is oftener under this proportion than over it. Freight cars vary very much; I have seen cars weighing but three and a half tons intended to carry five tons, and I have seen them with ten tons intended to carry eighteen tons freight. Passengers cars about fifty feet long weigh never much under eight tons, though the railroad men have now awakened to the disproportion of weight carried in railroad locomotion as compared to former modes of conveyance. The new sheet iron passenger cars, so beautiful in appearance, emanate from the efforts in that direction, and are a decided improvement, though far from success. The engineers and firemen on locomotives are paid a moderate per diem, say $200 to $300 per annum, and an extra compensation in mileage, through which, if they keep their engine in good order, they can earn sufficient to bring their pay up to about $2 per day. The principle works well, and is being extended into other portions of the service. I intend to continue my inquiries into this subject, and will resume it in future letters.

### The Metropolitan (London) Underground Railway.

We condense from the London Engineer, the following facts relative to this great subterranean road:

Among our railway systems, the Metropolitan is *sui generis*. It is unique in its mode of construction in the district it serves, and in its working. Many portions pass under densely populated districts and busy thoroughfares. It carried last year 7,462,823 passengers. The third class passengers were 5,110,823, or nearly 69 per cent.

The total capital is $2,800,000, but will amount to $5,400,000, when completed. The shares, at 50 per cent. discount the first year, have lately been sold at a premium of 40 per cent. The last half-yearly dividend was 3½ per cent. The revenue has risen in two years from £15,000 to £41,000. The receipts per mile per week are £703. The Blackwall line reaches about £394 per mile per week, and the North London £373, while the great companies having London termini, range from £60 to £160 per mile per week. The Metropolitan has carried 370,843 passengers in one week, and 83,440 in one day, without a casualty. The system of signals is so perfect that trains may be run every two minutes.

### RAILROAD ITEMS.

Philadelphia and Erie Railroad. — The earnings of this road for September were $281.573 44. Of this, under the agreement with the Pennsylvania Railroad Co., its lessees, the Philadelphia and Erie Co., receive 30 per cent., amounting at this rate for the year to about one million of dollars, out of which it has to pay interest on one million of 7 per cent. bonds issued by the Sunbury and Erie Co., on five millions of 6 per cent. bonds endorsed by the Pennsylvania Railroad Co., and on three millions of 7 per cent. bonds which are being issued for finishing the road, construction of piers, etc., at Erie — making an aggregate annual interest of $580,000 — leaving of the annual receipts $420,000 for dividends on the capital stock of five millions of dollars. The State holds the company's bonds for four millions of dollars, issued in payment of the State Works, which will draw interest after 1872, at which time, it is hoped the road will have increased its annual revenues in much greater amount than this additional interest.

During the ensuing year it is probable that an important line of railway connecting New York with St. Paul, Minn., will be near completion. This is to be accomplished by the connection of the Minnesota Central with the McGregor Western at Austin, near the State line of Iowa. Both of these roads are progressing rapidly to the point of juncture, and when united will form, *via* the Chicago and North Western, and Milwaukee and Prairie du Chien, a continuous railway route to St. Paul and Minneapolis. A very large and important trade is to be opened by this and the Northwest, drawing from the valleys of the Red river of the North and the Saskatchewan, will develop resources not yet appreciated by Eastern people.

Atchison & Pike's Peak R. R. — Major Gunn, Chief Engineer of the Atchison and Pike's Peak Railroad has received a dispatch from Col. Osborne, contractor for the road, directing him to push forward the work with all possible speed, and hire all the men he could obtain, as laborers. He states that ample funds are now in possession of the company to complete the whole road.—*Atchison Champion.*

Branch of the Pana Railroad. — A meeting has very recently been held at White Plains, Sangamon Co., Illinois, at which it was unanimously resolved to raise $20,000 to stock the Springfield and Beardstown Branch of the Pana Railroad. The sum of $75,000 is expected to be raised in the county, to secure the object, which is to have a road through it from north to west reaching the Illinois River, which is expected to increase largely its business and wealth. The funds are to be raised on bonds payable in 20 years.

A Long Stroke Locomotive.—There is on the Camden and Amboy Railway a locomotive with cylinders of 38 inches stroke, and a little over 14 inches bore—they have been rebored. This engine has been rebuilt, and has now coupled drivers and 5 feet wheels. Originally it had single drivers 10 feet diameter behind the fire box. The valve gear is on a return work, like most of the engines on this railway, and it has a flexible appearance, on account of the great length of the return cranks. We think this beats any modern engine for length of stroke, whatever it may do in working.—*Am. Artisan.*

Illinois Southern R. R.—A meeting of the residents on the line of this road was held at Cairo on the 12th inst. It was stated that fifty miles had been graded, and the ties on the ground and paid for. Over $40,000 had been expended and the indebtedness is but $25,000 to $30 000. It is supposed the English capitalists will finish the road, inside of 26 months, and the cars running on a continuous hroad guage hetween New York and Cairo.

A committee was appointed to fix the amount of subscriptions, with power to call further meetiugs.

Connellsville Railroad Case.—The argument in the case of the Connellsville and Southern Pennsylvania Railroad Company vs. the Pittsburg and Connellsville Railroad Co., will he heard hefore Judges Grier and McCandless, of the United States Circuit Court, in Philadelphia, on the 24th inst. It will be remembered that the answer to the interrogatories propounded hy Judge Grier to the Connellsville and Southern Pennsylvania Railroad Company were made some time since. The argument was fixed to take placc in Philadelphia in accordance with the desire of the counsel on both sides.—*Pittsburg Chronicle, Nov.* 7.

Union Pacific Railroad. — The officers of this Company are: John A. Dix, President; Thos. C Durant, Vice President, and John J. Cisco, Treasurer. It is expected that 100 miles of road west from Omaha will be completed by next June, and the grade will be reduced to 30 feet to the mile between the Missouri River and Platte Valley, the President having sanctioned the change of route.

New Indiana Railroad. — A company was organized on the 2d ult. for the purpose of huilding a railroad from Goshen, Ind, to Springfield, Ill., hy way of Middleport. Stark county, Ind., is said to be ready to appropriate $50,000 toward the enterprise, besides the aid that may be expected from other counties. The road will run through a fine country hitherto undeveloped.

Lawrence Railroad. — The New Castle Courant says the Lawrence railroad, from New Castle to Youngstown, is ready for the iron to within a short distance of Lowellville. Fifteen car loads of iron for this road have arrived, and track laying has commenced. The company expect to have the cars running to Lowellville, Ohio, early in December. From that place a line of hacks will run to Youngstown—only eight miles.

Jamestown and Franklin R. R. — The Venango Citizen says: "We are assured that the required stock has been taken in the Jamestown and Franklin Railroad, and parties have gone to Cleveland to make the necessary arrangements there, for the completion of the road. Several hundred workmen have been advertised for, and the road, it is expected, will be completed to this place in three months at farthest"

For the trifle of two roubles additional to the regular fare, passengers are received into hrilliantly lighted saloons on the road hetween Moscow and St. Petersburg. There they are treated to all the luxuries of a first class hotel parlor. When the hour of retiring arrives the *valet de chambre* conducts the geutlemen passengers to their sleeping apartments, while smart chambermaids point out to the lady travelers their bedrooms and boudoirs, fitted up as the advertisement says, "with every modern luxury, including haths."

Bay Du Noc and Green Bay State Road — The contractor has got six miles of this road from the north line of the county towards Menominee, including the bridge over Deer Creek (Little Cedar), completed according to contract. The halance of the road to Menominee will be open for winter travel by December 1st.

We learn that the Railroad Company have put a gang of men to work under the charge of F. Armstrong, Esq., to improve the road in Delta county, so as to open the whole route from Escanaha to Menominee hy the time the road in Menominee county is opeued. — *Menominee* (*Michigan*) *Herald.*

The sale of the Clinton Line Extension Railroad, from Hudson to Tiffin, O., took place at Cleveland on the 4th inst. This was one of the great railroad schemes of some years ago, that collapsed in the financial crisis of 1857. Considerable work was done on the road before its failure.

It is stated in the Mexican Times that the railroad hetween Puebla and the City of Mexico will he completed by the 1st of May next. There is more than 4,000 lahorers at work on the Imperial Railroad from Vera Cruz to Mexico.

Interest and Dividends. — The Chicago, Burlington and Quincy Railroad Company have made an extra scrip dividend of 20 per cent., and declarcd a cash half-yearly dividend of 5 per cent. on hoth stock and new scrip. The profit to the shareholders is thus made equal to 26 per cent., exclusive of the market prem um on the new scrip, should they elect to turn into cash.

The Loudon & Southwestern Railroad, with its hranches, is 572 miles long, and cost nearly $90,000,000. The receipts for passengers and freight the past year amounted to over $6,600,000, and during the past three years the stockholders have received an anuual dividend of 6 per cent.

The New York Central is having eighty new passenger cars huilt at Auburn, Albany and Springfield. They will he in a style of unsurpassed beauty. There are also twelve new sleeping cars on the road, containing each thirty-two hirths and a double set of hridal chambers.

Northern Pacific Railroad —A large and influential meeting was held at noon, Nov. 13, in the Merchant's Exchange, Boston, in favor of the immediate construction of the Northern Pacific Railroad. Mayor Lincoln, presided. Powerful speeches were made by ex-Gov. Curry of Oregon, and Gov. Fuller of Utah.

The chief of the Bureau of Arts and Sciences at Pekin, China, has made a favorable report on the question of railroads, and decides that the use of steam is not dangerous to a people. The world moves!

The Chief Engineer of the Illinois Central is now surveying the Mississippi at Duhuque, for the purpose of locating the bridge at that point. The preliminary examinations indicate that it will he built a mile or more helow the city.

It is authoritatively stated that a third road will he laid on the Great Western Railway of Canada. Cost estimated at $700,000.

The friends of the New Castle & Franklin Railroad, Penn, are making arrangements to secure its construction, now that the Jamestown and Franklin road is to be finished forthwith. The route will be from New Castle via Mercer to Blonnsville, where it will intersect the Jamestown & Franklin road.

It is officially announced that the Chicago and Rock Island Railroad Company bas purchased the Mississippi and Missouri Railroad. This insures the speedy completion of the latter road to Desmoines, Iowa.

The survey of a short line from Hamilton to Pierceville, is now in progress. This will connect the O. & M. and A. & G. W. roads, passing the I. & C. near Sunman and the Whitewater River, near Harrison, and effect a saving of 30 miles.

A hill has been introduced in the Mississippi Legislature to compel railway companies to provide separate cars for the negroes.

The people of Johnson county Iowa, are holding meetings with the object of making Iowa city a point in the great line that is to connect St. Louis and St. Paul.

The Grand Trunk Company have decided upon the extension through Michigan, by way of Lansing, Pawpaw and St. Joseph.

Canada has 2,410 miles of railroad in operation, costing, with equipments, $106,036,908.

Seven railroads will soon center at Oil City, one heing now finished, four being rapidly constructed, and the surveys are being made for the other two.

The Whitewater Valley Railroad will be finished to Brookeville, forty-three miles distant from Cincinnati, by January 1, 1866.

A mortgage deed was recorded on the 1st inst., in the office of the Recorder of Trumbull county, given by the Atlantic & Great Western Railway Company to John R. Penn, of New York, as Trustee, for thirty millions of dollars, for which seven per cent. honds are to be issued. The instrument required one thousand dollars of stamps.

Officers of the Mississippi and Tennessee road were elected the other day as follows: F. M. White, President; Minor Merryweather, Secretary and Treasurer; Miles Merryweather, Chief Engineer; O. T. Livermore, General Superintendent.

Southern Short Line R. R.—Col. Wilder has returned from an extended exploration through the mountains, and after carefully comparing the routes, decides in favor of the direct route. Landholders on the line are willing to make large donations of land, and requisite capital has been promised.

A freight train on the Jackson, Mississippi road, ran off the track the other day, injuring the conductor and several passengers and smashing up several cars. Somebody was supposed to have been careless.

The American Railroad Journal says that it has been calculated that at one time the amount of tax paid on the materials of a single locomotive was $5,000—or 20 per cent. of its cost. The tax is now not far from $2,500.

## MONETARY AND COMMERCIAL,

The market continues dull. There is a slight advance in gold, which is quoted as follows:

| | Buying. | Selling. |
|---|---|---|
| New York | @par50c prem. | 1 10 prem. |
| Philadelphia | par@50c prem. | 1-10 prem. |
| Boston | par@5"c prem. | 1-10 prem |
| Gold | 146@146½ | 146¾@146¼ |
| Silver | 138@140 | 141@142 |

Bonds of all descriptions share the general torpidity. In another column will be found an interesting history of the latest "corner." Below are quotations:

| | Tues. A.M. | Wed. P.M |
|---|---|---|
| U. S. 6 per cent. Bonds, 1881 | 105⅛ | 105⅜ |
| " 5-20 " old | 101⅛ | 101¼ |
| " 5-20 " new | 99⅛ | 99⅜ |
| " 10-40 " | 91 | 90⅞ |
| " One-year Certificates | 97⅛ | 97⅜ |
| 7-30s | 97 | 96⅜ |
| New York Central | 96⅞ | 97 |
| Erie | 91⅝ | 92⅜ |
| Hudson River | 107¾ | 108¼ |
| Reading | 114⅛ | 114⅜ |
| Michigan Central | 114 | 114½ |
| Michigan Southern | 76⅛ | 75½ |
| Illinois Central | 134 | .... |
| Cleveland & Pittsburg | 94 | 92⅞ |
| Chicago & Northwestern | 33 | 3 ¾ |
| " " pref. | 65⅜ | 65 |
| Cleveland & Toledo | 103 | .... |
| Rock Island | 105½ | 105½ |
| Pitts., Ft. Wayne & Chicago | 103½ | 103¾ |
| Ohio & Mississippi Certificates | 29¼ | 29 |

Earnings for the first week in November:

| | 1865. | 1864. |
|---|---|---|
| Michigan Southern | $118,777 | $94,935 |
| Michigan Central | 104,130 | 87,479 |
| Chicago & Alton | 69,802 | 69,535 |
| Detroit & Milwaukee | 42,107 | 26,233 |

The earnings of the Chicago and North-Western Railway for the year ending May 31, 1865, were $6,820,749 75, and in the four months ending Sept. 30, the gain over the corresponding months of last year has been $913,691 21, or nearly 41 per cent.

At the same ratio of gain for the rest of the year, the gross earnings to May 31, 1866, will be:

| | |
|---|---|
| In round numbers | $9,600,000 |
| All expenses and taxes at the same ratio as previous year, say 7 per cent. | 6,432,000 |
| Net earnings | $3,168,000 |
| Interest | $900,000 |
| Seven per cent. on preferred stock | 894.425 |
| Rent on leased roads | 367,115 — 2,191.540 |
| Net for common stock or more than 7½ per cent, | $976,460 |

In this estimate it is assumed that the heavy ratio of expenses for the year ending May 31, 1865, will be carried through to 1866, but the result should be more favorable, in consequence of the lower prices of materials.

The gross earnings may considerably exceed this estimate from the additional equipment to be placed upon the road during the year, and from the development of the Iowa extension and Peninsula line

Of the increased earnings of the four months named, the freight shows a gain of about 35 per cent., while in passenger business the gain is over 54 per cent.

Earnings of the Racine and Mississippi and Northern Illinois Railroads for the week ending October 31:

| | |
|---|---|
| 1865 | $24,455 |
| 1864 | 20,558 |
| Increase | $3,897 |

Earnings of the Chicago and Alton Railroad for the fourth week in October:

| | |
|---|---|
| 1865 | $85,753 |
| 1864 | 77,643 |
| Increase | $8,110 |

The Marietta and Cincinnati Railroad Company earned October:

| | |
|---|---|
| 1865 | $40,032 50 |
| 1864 | $28,610 38 |

Total this month to date:

| | |
|---|---|
| 1865 | $117,604 30 |
| 1864 | $90,576 04 |

Total for the fiscal year, commencing first of January:

| | |
|---|---|
| 1865 | $1,020,919 58 |
| 1864 | $774,934 35 |

The total traffic of the Atlantic and Great Western Railway for the month of October was:

| | |
|---|---|
| 1865 | $719 911 |
| 1864 | 396,847 |
| Increase | $323,064 |

A telegram from a San Francisco house, dated Nov. 8, quotes stocks there as follows: Gould & Curry, $1,090 per foot; Savage, $780 per foot; Potosi, $335 per foot; Ophir, $390 per foot; Hale & Norcross, $150 per foot; Crown Point, $650 per foot; Yellow Jacket, $670 per foot; Belcher, $400 per foot; Alpha, $825 per foot; Imperial (per share), $160 per foot; California Steam Navigation Company, 73 per cent.; California State Telegraph Co., 29 per cent.

The following is a statement of coal transported on the Delaware and Hudson Canal for the week ending Nov. 4, 1865, and for the season:

| | Week. | Season. |
|---|---|---|
| Del. and Hudson Canal Company | 27,910 | 605,297 |
| Pennsylvania Coal Company | 2,110 | 33,329 |
| Total tons | 30,020 | 638,625 |
| For the same period last year: | | |
| Del. and Hudson Canal Company | 19,000 | 757,885 |
| Pennsylvania Coal Company | 10,011 | 454,814 |
| Total tons | 29,011 | 1,212,699 |

The shipments of coal by the Wilkesbarre Coal and Iron Company in October were:

| | |
|---|---|
| By Canal | 41,108 tons. |
| By Rail | 12,560 " |
| Total for the month | 53 668 tons. |

It is understood that the Michigan Southern Road has made large settlements with its guaranteed stockholders. The settlements absorb the money upon which the common shareholders have been depending for a dividend, and at the same time increase the amount of common shares upon the market.

The Milwaukee and Prairie du Chien road earned in 1865, $2,047,414—an increase over 1864 of $336,133.

The Chicago and Northwestern road earned for the week ending the 7th, $174,606 75, an increase over the same week last year of $8,099 54.

The Grand Trunk earned for the week ending the 4th, $141,446; an increase over the same week in 1864 of $24,596.

## RAILROAD OFFICES AND AGENTS.

**Atlantic & Great Western Railway.**

D, C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord, General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A B. Waters, Freight and Ticket Agent, Cor. Third and Walnut.

**Ohio & Mississipp**

W. E. Bruce, Freight and Ticket Agent, Gagette Building, 82 West Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J. R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg, Contracting Agent, Vine St. under Burnett House.
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent. ", "

**Central Ohio & Pittsburg, Columbus and Cincinnat**

James E. Shields, General Agent, No 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A. J. Day, S. W. Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J. W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burn House.

**New York Central.**

G. B Gibson, S. W. Passenger Agent. W. H. Page Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Ittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent, No. 5 East Front St

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.

Best Route to St. Louis and Chicago

**MONDAY, OCT. 31.**

## Indianapolis and Cincinnati

## RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Cbicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10:30 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House. Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt

---

## BENJ. H. LATROBE AND C. H. LATROBE,

## CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

**LAW BUILDINGS,**

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also, the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.

**Through to Pittsburg without Change.**

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freigbt Agent,
myll Pittsburg. Pa.

---

## Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:30 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
H. F. FULLER, General Ticket Agent. myll

---

# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

**EASTERN CITIES!**

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:00 A. M. | 10:40 P. M. |
| HAMILTON..... | 9:57 " | 11:43 " |
| DAYTON..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

## THIS IS THE ONLY ROUTE

TO THE

## OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

**SLEEPING CARS**

Provided for all Night Trains, and Smoking Cars for Trains.

**Ample time is allowed, at all hours, for meals.**

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

**CONNECTIONS ARE CERTAIN!**

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, } Passenger Agents.
CHAS. COOK, }

---

## CENTRAL RAILROAD

—OF—

## NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

---

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:90; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

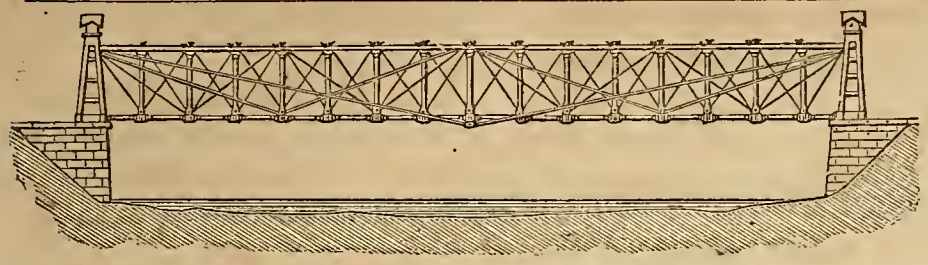
JAMES H. HOYT, Superintendent.

---

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 10 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



*(Plan of Bridge.)*

## FINK'S PATENT

## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

## SCREW BOLTS,

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

## LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or not of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

## KNOX & SHAIN,

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

## FINDINGS,

AND

## MACHINERY,

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

## Chilled Wheels and Tyres

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

## AMERICAN BANK NOTE COMPANY.

*Bank Note Engravers & Printers.*

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

## SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

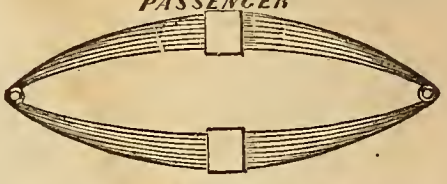
## RAILWAY SPRINGS.

**FREIGHT**





*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

**STOCK BROKER,**

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collections.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by nerw unning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHING. TON CITY.

W. P. SMITH. *Master Transportation, Baltimore*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sle-ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P M. |
| Mail and Express | 9 40 A M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omn buses call for passengers.

## Change of Time.

SUNDAY, JUNE 19, 1865.

**Cincinnati to St. Louis without Change of Cars.**

# OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Louisville, St, Louis and Cairo Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞ Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent.

W. D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place nnites with Railroads for and from all points in the West and North-west.

# SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S WROUGHT IRON ARCH

# BRIDGES,

AND

# CORRUGATED IRON ROOFS

ARCHED AND FLAT.



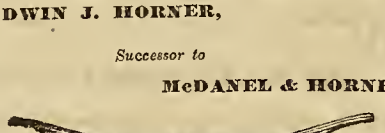
CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

# FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO.

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

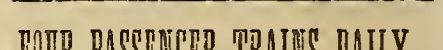
**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!!



# FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD, T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, NOVEMBER 23, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$2 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

W. A. MUNSELL,
*General Agent.*


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | *Depart.* | *Arrive.* |
|---|---|---|
| Morning Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:00 P. M. | 11:30 A. M. |
| Night Express | 10:00 P. M. | 9:00 A. M. |
| Lightning Express | 7:00 P. M. | 4:35 P M. |
| Morrow Accommodation | 5:20 P M. | 8:00 A. M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Express Mail | 9:10 A. M. | 5:30 A. M. |
| Night Express | 10:50 P. M. | 7:30 P M. |

MARIETTA AND CINCINNATI,

| | | |
|---|---|---|
| Mail | 7:40 A. M. | 6:15 P. M. |
| Hillsboro Accommodation | 3:40 P. M. | 11:00 A. M. |
| Night Express | 7:15 P. M | 5:00 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Toledo and Detroit | 7:00 A. M. | 9:25 P. M. |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P M. |
| Richmond and Chicago | 7:00 A. M. | 9:25 P. M. |
| Dayton Accommodation | 2:10 P. M. | 9:25 P. M. |
| Indianapolis & Cambridge City | 6:00 A M. | 10:05 P. M. |
| " " | 4:00 P. M. | 12:25 P. M. |
| Toledo, Detroit & Huntsville | 5:00 P. M. | 12:50 P. M. |
| Hamilton Accommodation | 7:00 P. M. | 6:45 A. M. |
| Richmond & Chicago | 6:00 P. M. | 12:25 P. M. |
| Hamilton Accommodation | | 7:55 A. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R.

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 10:05 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:10 P. M. | 12:25 P. M. |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Springfield & St. Jo. Express | 2:00 P. M. | 4:45 P. M. |
| St. Louis and Chicago Express | 5:15 P. M. | 1:30 A. M. |
| Lawrenceburg and Harrison Accommodation | 4:30 P M. | 8:30 A. M. |
| Harrison Accommodation | 9:25 A. M. | 2:35 P. M |

OHIO AND MISSISSIPPI.

| | | |
|---|---|---|
| St. Louis, Cairo and Louisville | 7:20 A. M. | 8:00 A. M. |
| Louisville Special Train | 3:45 P. M, | 1:50 P. M. |
| Louisville, St. Louis and Cairo Express | 7:50 P. M. | 11:00 A. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M. | 6:30 P. M. |
| Caboose Accommodation | 4:00 P. M. | 7:45 A. M. |

COVINGTON AND LEXINGTON.

| | | |
|---|---|---|
| Morning Express | 6:00 A. M. | 11:00 A M |
| Evening Express | 1:50 P. M. | 6:08 P. M. |

### "Errors in Mechanics" and their Result.

We have received from Mr. Thomas W. Bakewell, an old citizen of Cincinnati, and a scientific gentleman, a printed tract called "REMARKS ON RECEIVED ERRORS IN MECHANICS, ETC." To us this tract is a very interesting one. We know little of practical Mechanics, in regard to the subjects on which he has written; but, the principles he states seem to us very clear, and if true, they are of some practical importance.

Mr Bakewell says:

In considering mechanical effect, there is a prevailing fault to ignore oblique, and confine results to direct action. The supposed loss of power by the crank motion, of the loss by oblique action of the paddle-wheel, and the under estimate of the force to burst a cylindrical boiler, by excluding oblique action, are instances of this error.

The required intensity of two opposing forces, is inversely as the motions, in the directions in which they act, whether that motion be actual or supposed. In the first case, they are *moved*, and in the latter *held* in opposition.

An illustration of the effect of supposed motion is that of the lever; of which we suppose the longer end to be double, and consequently the weight at the shorter end will be double the other. Now, in some way or other, there is weight *due* to both ends of 2 each or 4; but, in fact, there is only a pressure on the fulcrum of 3. The other 1 is balanced by a *supposed* motion of the lever. The supposed *motion*, although the action and reaction are equal and simultaneous, really does counteract the additional weight; but is very difficult to account for.

Mr. Bakewell then takes the case of the cylindrical boiler; in which case a mechanical error becomes of great importance.

Mr. Bakewell says:

THE CYLINDRICAL BOILER.

A ring of the cylinder is taken for investigation, and the question at issue, is as to the force exerted by the inside pressure to part the ring at any two opposite points The received theory gives the force as equal to the pressure on the diameter, separating and only using from the various directions of pressure the direct force. But the correct amount of force to part the ring, is as the pressure on the semi circumference, making an excess of force over the diameter rule of 57 per cent.

This large and dangerous error governs in the estimate of the strength of boilers, to sustain an intended pressure of steam. How many explosions it has occasioned may be conjectured.

Of this "error," Mr. B. gives a diagram and demonstration. A simple examination of the *direct* pressure on a circumference of a rim, calculated by the diameter and chords, must obviously be as much less than the pressure on the whole circle, as the *versed sine* is less than the *arc* to which it corresponds. Mr. B. says, that the difference is 57 per cent; that is, that the actual pressure on any rim of a boiler is 57 per cent. greater, than that calculated by the diameter rule. If this be so, no matter how great the *tests* applied in the trial of boilers, the result must always be 57 per cent. less, than what it is assumed to be by rule. Is not this enough to account for many accidents by the explosion of boilers? Will it not account for such accidents as that of the St. John?

Mr. Bakewell traces out similar errors in the calculated effect of the paddle wheels; of the circumference of the "ellipse," etc. We think the public are indebted to scientific gentlemen, who will make such investigations, and we hope they will be continued.

### Debt of the United States.

| | Sept. 30. | Oct. 31. |
|---|---|---|
| Debt bearing interest in coin | $1,116,658,191 | $1 161,157,691 |
| Debt bearing interest in lawful money | 1,200,009,120 | 1,191,819,787 |
| Debt on which interest has ceased | 1 389,320 | 1,373 910 |
| Debt bearing no interest | 366,891,093 | 386,523,339 |
| Total debt | $2,744,947,721 | $2,740,854,753 |

LEGAL-TENDER NOTES.

| | | |
|---|---|---|
| One and two years' five per cents | $32,954 230 | $32,5?6 901 |
| U. S. old issue | 392,070 | 392,070 |
| U. S Notes, new issue | 427,768,499 | 427,768,169 |
| Comp. Interest Notes | 217,012 141 | 173,012,141 |
| Total | $678,126,940 | $ 33,769,581 |

AMOUNT IN TREASURY.

| | | |
|---|---|---|
| In Coin | $32,740,788 | $31 551,967 |
| In Currency | 56,236,411 | 33,800,591 |

The above comparative statement of the United States debt, on September 30th and October 31st last, justifies what we say, in another part of this paper, concerning the urgent necessity of proceeding slowly and cautiously in the management of our finances. The total of the figures above given shows a decrease in our public debt of over $4,000,000, within the short space of thirty days. If we take in consideration that the receipts of the Government from customs for the first quarter, ending September 30th, have amounted to over $46,000,000; that, at this rate, the receipts for the fiscal year ending June 30th, 1866, will reach the stupendous figures of nearly $185,000,000; lastly, that the internal taxes produce over $1,000,000 per day—it will readily be perceived that we are, financially speaking, gradually working out the problem of our salvation. The public treasury will receive from every source, in 1866, over $500,000,000—it may be $600,000,000—as the internal revenue law will be put into full operation next year in the Southern States. Talk after that of repudiation and financial cataclysm!

Supposing that the Treasury's receipts next year should reach the neighborhood of $600,000,000, and that our total expenditures should not exceed $300,000,000, a very large sum could be employed, *the very first year after peace has been restored*, to redeem a portion of our public debt. This will be done, if our legislators do not rashly disturb the working of our financial system, open to criticism and faulty in some of its features, as perhaps it is. And it will be the first time in the history of nations that a people have proceeded so promptly, after a gigantic and ruinous struggle, to the reduction and extinguishment of a public debt created during war.—*Stockholder.*

### A Wonderful Boiler.

Ebenezer Danforth, of Geneva, Ill., is the patentee of the following invention which has been sold to a New York Company, with a capital of $2,100,000.

We copy from the Chicago Journal:

Let the reader imagine a hollow iron sphere two and a half inches thick, and having a diameter of thirty by twenty-two inches—flattened at the top and bottom for convenience in putting it into its place over a small stove or grate. Inside of this globe, which is not much larger than a farmer's dinner pot, is a common three-quarter inch gas pipe running to within a few inches of the bottom, and terminating in a small ball or sprinkler, perforated with forty diminutive holes. The fire is built under the globe, and in the sprinkler is a tablespoouful of water. Now, most people would suppose that in order to generate steam all that would be necessary would be to discharge the water in the pipe against the hot iron. Not so. The air in the sphere is at a temperature of from five hundred to six hundred degrees of Fahrenheit's thermometer. The water in the sprinkler is hot, and the sprinkler soon becomes surrounded by a superheated vapor, into which the water is spurted, becoming heated steam before it can reach the surrounding sphere. This spurting or ejectment of water from the pipe is repeated as soon as a revolution of the engine attached has consumed the steam just made, and the engine itself, a five horse power, with a cylinder of five inches bore and a piston eight inches long, is propelled with the force of an engine of fifteen horse power, with a pressure of one hundred and thirty pounds, running two corn mills and turning out feed at the rate of forty bushels an hour. Show us any thing like this in mechanics before this invention!

### Atlantic and Great Western Railway.

It will be seen by the following from the Philadelphia *Ledger* that the contract is not only made by the above road for the lease of the Catawissa Railroad, but it has been fully ratified by the stockholders. We cannot but feel gratified at this result, and we congratulate the citizens of Cincinnati and the West, that they will shortly have an unbroken line of railroad, under one management through to the seaboard. The embarrassing position of the Atlantic and Great Western will be entirely relieved, and the trade and travel will be better accommodated.

The main question on the street was, "Will the long talked of lease of the Catawissa road be consummated by the approval of the stockholders?" Shortly after twelve o'clock the stockholders met at the company's office, and the lease and contract was confirmed without a dissenting voice. This document, in substance, sets forth that the Atlantic and Great Western Railway Company is to take possession of the Catawissa road on the 1st of December next, for the period of nine hundred and ninety-nine years. The lessees agree to pay to the Catawissa Company $365,000 per annum, in monthly instalments.

A pair of compensating car wheels and axles, adjustable to different gauges of railways, is on exhibition at Boston.

### Progress of the Union Pacific Railroad.

The Union Pacific Railroad, beginning at Omaha (the western terminus of this company's air line road,) and extending thence to and up the broad valley of the Platte River, over an almost perfect plain for some five or six hundred miles, to the extensive mineral deposits of Colorado, and thence through the gold and silver regions of Utah, Nevada and California to the Pacific coast, has already commenced the work of construction at Omaha; has near a hundred miles of roadbed, more or less, under process of grading, the first forty-miles of which, from Omaha to the valley of the Platte, is far advanced towards completion; has about six miles of track already laid; has engines, cars, ties, bridge-timber and machinery on hand and accumulating; has iron rails on hand at Omaha for about fifty to sixty miles of track, and expects to complete one hundred miles, extending to the vicinity of the "Loup Fork," and a little beyond it, by the 1st June next, and to progress annually and more rapidly to Denver and beyond thereafter.

There would seem to be no good reason why this Union Pacific Railroad, aided by its large subsidy from Government, and its extensive grant of public lands, should not be extended well toward Denver about as soon as the road across Iowa, under lease to this company, can be extended to it.

The Central Pacific Railroad Company of California, (whose line of road extends from the navigable waters of the Pacific at the City of Sacramento, east, across the Sierra Nevada Mountains, to Virginia City, and beyond, until it meets the Union Pacific Railroad of the Atlantic slope,) in a recent report, announced the completion of their road to Clipper Gap, forty-four miles from Sacramento, and state that twelve miles more will be opened by the 15th of September, 1865, and that they expect to open a further section of twenty-two miles, to Dutch Flats, by the 1st of April next, sixty-eight miles from Sacramento, and by a year from this time they hope to complete to Crystal Lake, twenty miles further, and within fifteen miles of the summit of the Sierra Nevada Mountains.

They further propose to commence the construction of their road down the eastern slope of the Sierra Nevada before completing the heavy work near the mountain top; carting the iron rails past the unfinisbed portion, and thus expediting the extension of their road.

The President of the road states in his report, that the road may be extended to Salt Lake by the summer of 1868, and expresses the hope that he shall there meet the Pacific road from the Atlantic side of the mountains.

This company have extensive means besides the large Government subsidy which they receive for the prosecution of their work.

Should the progress of the Union Pacific Railroad on the eastern side equal that proposed for the western slope of the Rocky Mountains, the public would in a short period of time be agreeably surprised at the completion of the greatest and most important national work, both politically and financially, now before the country.

With the construction of this road through the extensive gold and silver regions of this country, which it is to traverse, will begin a new era of more intense and extended enterprise perhaps than any that have ever preceded it, and resulting in an annually increasing development and production of gold and silver, probably many times exceeding all that has, as yet, ever been produced; the effect of which upon the traffic and business of all Western roads, in connection with the Pacific road, will of itself be likely to be such as severely to test their capacity.

The buoyant effect of the increased production of coin to follow the completion of the Pacific road, will be likely also to give a spring of increased and extended action to the business transactions of the country, enlarging values and operations, and adding materially to the general prosperity of all undertakings.

OIL.—The fickle character of even the best of Oil wells, is shown by the following from the Titusville *Herald* of the 14th inst. We do not, however, understand from this that this well has now become worthless, but that in consequence of the escape of the confined gases in the oil reservoirs, it has ceased to be a flowing well, and that the proprietors will have to resort to the pump to enable them to procure from the deep recesses of the earth the coveted oily treasure.

The stoppage of the Frazier or United States well, which occurred on Friday last, naturally creates some sensation among oil men. We personally visited the well a fortnight since, when it was producing about four hundred and eighty barrels per day—a very marked decline from what it was popularly rated outside. The report that it had entirely failed on Friday was generally discredited, but it is confirmed. The cessation of the flow was sudden and unlooked for, and was first made known to the company by two visitors at the well, who discovered that it had ceased flowing, and reported the circumstance to the office.

The Frazier was the first well struck on the Holmden farm. It was struck in the early part of January, and started at two hundred and twenty-five barrels per day. It is the second productive well of any consequence that has failed. The Holmstead, which was the second well struck, suspended operations some time ago. Both wells have proved highly remunerative to their owners, and have made name and fame for Pithole.

### The "Dummies" of the Hudson River Railway.

These engines have been at work over five years—one of them about six years—and have been found on the whole satisfactory. Some experiments and alterations have been made on the novel parts, chiefly the frictional gearing; the angle of the V has been made more or less acute, and, finally, left somewhat less acute than it was at first — the angle then being 60°. It has been found that, after the first trip, the screws that set up the gearing may be slackened, and then set up by the thumb and finger, and the gearing will not slip. Slipping has been rare; but when it does occur to much extent, it is liable to wear a place that will occasion slipping whenever a severe strain occurs at the moment the worn part is in contact. It is also suspected that the friction consumed more power than is consumed by spur gearing. On these accounts, although it has worked well, it has been determined to try the old gearing; and cog-wheels, with hickory cogs saturated with oil, are being made for one of the engines; and another is to have cast iron gearing. Thus there will be a fair test of the three kinds of gearing.

The cost of haulage by the dummies is from 25 to 30 cents per car at the present high prices. Before the war it was 15 cents. The contract price of hauling passenger cars to Chambers street was for many years 75 cents, and since the war has been higher; but at present the passenger cars do not come below Thirty-third street. The cost as compared with horses is less than a fifth. On the Harlem Railway it costs more for horse-power, the company keeping its horses; and the cost before the war was not less than a dollar per car, the distance being about the same—three miles. From 25 to 33 cents per mile per car was the cost of horses, and 5 cents per mile for dummies. Three cents per mile used to be the average on the Boston and Worcester Railway, out of the city, at high speed; but on the Hudson River Railway it is more, the speed being greater. The causes of the great cost of haulage by the dummies are, probably, the dirty state of the rails in the city, the numerous sharp curves, and the back pressure caused by exhausting into the tank, and the expense of blowing engines to urge the fires, and the greater cost of the kind of fuel used by the dummies to avoid smoke.

Notwithstanding the superiority of the dummies, there is a set of agitators who constantly besiege the Common Council against them on pretence that they are dangerous. But we never have heard of their doing harm; on the contrary, we have heard from persons who have places of business along the line, that they are much safer than horses, because they draw a whole train, whereas horses draw but one car at a time, and one car is as dangerous as a whole train. The dummies make no dirt; but the horses necessary to do their work would make an enormous quantity of dirt.—*Am. Artisan.*

---

The Union Pacific Railroad, Eastern Division.—On Friday, October 27, the President of the United States decided that Government bonds should be issued to the Union Pacific Railroad Company for the forty miles of road built and in use between Wyandotte, opposite Kansas City, and Lawrence. The subsidy is $16,000 per mile, making the whole issue of bonds ordered by President Johnson $640,000 as a first instalment to the national work.

From the misrepresentations of parties interested in a more northern route, and other causes, the interior Department had become committed against the acceptance of the aforesaid 40 miles of the Union Pacific Railroad. But the new parties in interest in the road, representing all the several connecting roads in the continuous line between Philadelphia and Kansas City, having first put a large amount of their own money into the enterprise, as earnest of their confidence and intentions, proceeded to Washington, where they submitted their case on its merits to the Executive of the United States. President Johnson being a practical man and his railroad visitors being representatives of almost one hundred millions of railroad capital, comprising men exalted and distinguished in railroad circles—men who, in addition to dollars, will invest an experience which dollars cannot buy—it logically ensued that the chief magistrate and the railroad deputation harmonized in opinion, on a frank review and full examination of the case. The Secretary of the Interior, too, reversed his position, like a prompt and impartial minister, to make his official action conform to the preponderance of direct testimony and collateral facts on the side of the influential, potential, and public-spirited deputation, backed by 1,317 miles of road in operation from Philadelphia to Kansas City. President Johnson seemed to relish and enjoy this rail road matter so brought to his official consideration by men whose co operation with the Government in an enterprise to carry an iron line to the Rocky Mountains, and fill out an unbroken communication across the continent, is a guarantee and assurance to the country that all contracts entered into on their part will be promptly executed, leaving to the national authorities the single duty of issuing the bonds already provided for by existing laws.

As additional surveys will doubtless disclose new truths which may affect the question of location—as witness the recent discoveries on the Smoky Hill route—it may be that Congressional action on the matter of route may be desirable, in which case no opposition should be interposed, for the interests of the country demand the speediest practicable construction of a Pacific Railroad to the one hundredth meridian line, thereafter to become *the* Pacific Railroad to the Pacific ocean.—*R. R. & M. Register.*

---

### A New Generator.

Important Improvement in Steam Boilers. Mr. William C. Baker has invented an apparatus for engendering steam which appears to us to be much safer than any ordinary steam boiler.

The invention is not altogether a recent one. Messrs. Baker & Smith, the present owners of the patent, have for several years employed the chief features of it, in the construction of steam apparatus for warming dwellings and public buildings: but so entirely safe and economical has been its action, and so generally satisfactory has its operation proved, that Mr. Baker has been induced, in view of the alarmingly increasing frequency of accidents from steam boilers of the ordinary construction, to attempt the adaptation of his plan to the production of steam for power.

The chief point of safety claimed by Mr. Baker in his plan is the subdivision of the whole mass of water and steam contained in the generator into a large number of small portions

It is well known to every practical engineer, that in the ordinary cylindrical boiler each square inch of the boiler shell has to sustain not merely the pressure of the amount of steam or water which bears directly upon itself, but also the strain upon every other inch in the whole boiler surface, so that although the pressure, as indicated by the steam gauge, may be but a few pounds to the square inch, the actual strain upon a large boiler may amount to tuns on every square inch of that boiler's shell. Of course, the larger the diameter, or rather the circumference of the boiler, the greater the strain to every portion of its circumference. Take a chain of 100 links, and stretch it tightly between two posts, and suspend to each link of that chain a 100 pound weight. Now, although the weight nominally supported by each link is but 100 pounds, the strain upon the whole chain is 10,000 pounds, and this strain is not divided among the links, but each individual link must sustain the entire strain, and if in the whole length of the chain there should be a single link unable to sustain that strain, thechain gives way at that point. The same principle applies to the shell of the steam boiler. In the case of the unfortunate steamer St. John, although the nominal pressure on her boilers might not have exceeded 28 pounds to the inch, as was stated by the engineer, the sheet which gave way was actually sustaining a pressure of many hundred pounds when the rupture occurred. Had the iron been good it would borne this; being faulty it could not Mr. Baker, comprehending the principle of this multiplied pressure, avoids the danger resulting from it by dispensing entirely with the large outer shell, and forming his generator entirely of separate chambers of small circumference.

The apparatus consists of a series of strong, jointless, wrought-iron tubes, arranged in horizontal ranks and tiers, and connected at the ends by elbow joints, into which the ends of the tubes are firmly screwed. These—the only joints employed in the generator—are protected from the fire by brick work, and by an iron partition built in with the tubes. The fire chamber—of brick—extends under about two-thirds of the length of the apparatus at the end furthest from the feed-water. The flame and heated air from the fire pass around and among the tubes to the top of the chamber, and then turning, pass down through the other third of its length, leaving last that portion of the generator which is lowest, both in position and temperature. The employment of a series of tubes to form a vessel in which water may be converted into steam is not new, but Mr. Baker claims that by his peculiar arrangement several of the prominent objections which have hitherto existed to their use, have been avoided.

Among the chief of these was that the formation of steam in the tubes caused a current which carried the water with it to the highest portion of the boiler and thence into the engine. Mr. Baker overcomes this by introducing in his apparatus a cylindrical iron chamber, arranged horizontally at the end of the apparatus, into which the two adjacent horizontal tiers of tubes open. The water line is maintained at the hight of the center of the chamber. The formation of steam in the lower tier of tubes causes a current of steam and water through the coil until they arrive at this chamber, when, the current being interrupted, the water settles by its own weight and returns to the lower series of tubes through an auxiliary passage, and the steam passes upward through the remainder of the coil, being thoroughly dried and slightly superheated to the condition best adapted for use.

It is obvious that by thus forming the boiler entirely of small tubes, a very large fire surface in proportion to the volume of water is obtained; and as the flame and currents of heated air and gases from the fire are also finely subdivided in their passage through the ranges of water tubes, it is evident that an unusually large per centage of the heat is utilized. As these currents of heated air are last brought in contact with the coldest portion of the apparatus—that into which the feed water is introduced—they continue to supply heat until they arrive at much lower temperature than that at which they leave an ordinary boiler. This is readily proved by holding a thermometer in the throat of the flue leading from the boiler, which showed a temperature of less than 200 degrees, although the generator was forming steam rapidly, while in the flue of an ordinary boiler under the same conditions the temperature is usually from 400 to 500 degrees.

Of course all the ordinary appliances for safety or economy, gauges, and safety valves, can be applied to this generator, as readily as to any ordinary boiler, if desired: Messrs. Baker & Smith are now employing one of these generators to furnish the power for their

factory, No. 37 Mercer st., where engineers and others interested in these matters can have an opportunity of witnessing its practical operation.—*N. Y. Tribune.*

### Accidents on Foreign Lines.

The New York Evening Post says:

We owe our readers an apology, perhaps, for having misled them in a matter of some importance. Two or three times we have stated that not a single "accident" has occurred on any German railroad since the origin of the system, thirty or forty years ago. But a German gentleman, fresh from travel on the continent, informs us that we are wrong, and that last summer, on the Madgeburg road, two persons were badly hurt by a casualty of some kind or other which occurred. We therefore hasten to correct our statement, so far as to say that in thirty or forty years experience on the German rails only two persons have been injured by accidents, and these were not killed, but merely very much hurt. How a rail road director or conductor or engineer in this country must stare with incredulity as he reads such an assertion!

The Post says of the Cunard Steamship Line:

1st. They have never failed to sail on the appointed day, and almost at the appointed hour.

2d. They have never lost a passenger by any conduct of their own. Once or twice passengers have fallen or jumped overboard, and once the Europa ran into another vessel during a dark and stormy night.

3d. No injury has ever occurred to any passenger from any accident to, or arising from, the machinery.

4th. They have never lost, out of millions of letters they have carried, a solitary letter.

Now these facts may seem extraordinary, and, measured by the standard of our usual American practice, they are extraordinary. But they are none the less easy of explanation. The managers of that line, knowing the laws of nature, knowing too the usual experience and dangers of the sea, take care to provide against them as far as human ingenuity can do so. The consequence is "good luck," as it is called, or an almost complete exemption from those preventable casualties which we euphuistically call "accidents." They have no accidents simply because they do not mean to have them, or, in other words, because they provide against them by adopting means to that end.

It might be the same with other steamboats and railroads, if the managers adopt the same precautions. There is no more reason why we reap a crop of two hundred railroad slaughters every year than there is that we should gather a thousand bushels of Canada thistles from each farm. Thistles will grow every year if we permit them, and railroad "accidents" will happen every week if we let them. But by proper foresight, cautiousness and care, we can hinder one as easily as the other. The laws of nature, of materials and motion, are invariable, and we only need to adapt our works to their immutable rule to render them perfect, to lift them above every contingency and mishap.

A passenger left thirteen thousand dollars in a sleeping car at Cleveland, and the money was found and restored to him by the colored porter. The loser, with remarkable liberality, took out a five dollar bill and presented it to the honest darkey, without asking for any change.

### Plans for Resuming Specie Payments.

There is a growing, and we may say, a legitimate desire to see the country restored to specie payments, and there can be no resumption of specie payments until the greenbacks, or Government paper, are either withdrawn from circulation or made equivalent to specie. How to arrive at either of these results is the question which commences to engage the attention of the press and financial writers. In one of its late issues, the *Tribune* urged Congress to authorise the Secretary of the Treasury to borrow on long time at low rates, and on short time at higher rates, whatever sums he may find necessary to redeem and cancel greenbacks until the residue shall be at par with coin.

Some other papers are opposed to the plan advocated by the *Tribune;* in their opinion, it is a quack remedy which would inevitably work mischief. Says the *World:*

"Here are between six and seven hundred millions of debt, on which the Government pays no interest; and as we are to have a paper currency of some kind, a considerable portion of the greenbacks may as well remain for a while in circulation for the relief of the people, who are paying the exorbitant rate of seven and three-tenths per cent on large amounts of the public debt. A loan for redeeming, at the earliest moment possible, the part of the debt on which we are paying exorbitant interest, would be sounder policy than the loan which the *Tribune* proposes for the immediate redemption of that large part of the debt which draws no interest. Portions of the five twenties are redeemable, if the Government so pleases, within a year; and a new loan at lower rates to replace these would be more economical than to borrow money on interest to take up the greenbacks which draw none. Beside, a large loan, such as the *Tribune* proposes, solicited for the avowed purpose of making money scarce, would be self defeating; since, in the approaching stringency of the money market, capitalists would see than they could make more profitable investments.

A financial writer of incontestable ability—John D. Van Buren—in a letter addressed to the *Post*, after stating that the pressing financial question is, how shall the Government provide for redeeming legal-tender notes, suggests the following plan:

"First That the internal revenue be made sufficient to meet all the expenses of government and to pay all its interest, including the interest which is payable in gold. The interest now payable in gold to be paid in paper, adding the premium on gold at the time of payment.

"Second. That the whole of the customs revenue for the next two years, payable as now in gold, be pledged to the redemption of the legal-tender notes. After the two years there may or may not be a small annual appropriation, say $10,000,000 each year, for the same ultimate purpose of redeeming the notes

"Third. That the notes be not actually redeemed as fast as the gold comes in, but that the gold be simply set aside and retained by the Government or in the hands of a commission, pledged exclusively to this one purpose of redeeming the notes."

Two years of the customs revenue would amount to $150,000,000, and then adds Mr. Allen, it is plain that when that sum has been "accumulated at the central point—New York City—pledged exclusively to the redemption of the notes, the Government might then safely offer to redeem them on demand, but not to cancel them, and that the whole mass of the whole $150,000,000 would be and remain at par with gold all over the country.

It is possible that the issuing of gold certificates by Mr. McCulloch to depositors of gold coin at the Sub-Treasury has something to do with the plan suggested by Mr. Allen. At all events, our readers will perceive, while opinions how to restore the country to specie payments are so conflicting, that the advice we gave the Government is eminently sound, when we said, in our last issue, "the great danger respecting our finances is the adoption of hasty measures. *Sufficient time must be taken before reducing the volume of currency.* The patriotism of the millions have afforded the Government the means of carrying on the war. The same patriotism will discover to our rulers the means to bring order out of the chaos in our national finances, and to arrange everything pertaining to the public debt in a satisfactory manner."—*Stockholder.*

### New and Important Discovery in Telegraphing.

LANCASTER, OHIO, October 28, 1865.

EDS. COM.—Some years since M. L. Mason, a resident of Carroll, in this county, conceived a new plan of transmitting telegraphic dispatches, differing from the present plans of land and ocean telegraphing. This system the discoverer terms "Atmospheric Telegraphing." During the past seven years Mr. Mason has experimented at all seasons of the year, and with such success as to satisfy himself, as well as several scientific men, that by this system messages may be sent from New York to London *through the air.* By this plan, messages may also be sent from mid-ocean to either shore—a thing impossible under the present system of submarine telegraping.

The discoverer submitted his system to Professor John Williams, (one of the most learned, scientific men in the State, and author of the "Topical Lexicon,") who, after a careful examination, makes the following statement:

'I have examined a method proposed by Mr. M. L. Mason for telegraphing, by which the submarine cables may be dispensed with, and dispatches may be transmitted through the air between points on opposite sides of wide oceans. The plan is, in the nature of things, practicable; and I hope that Mr. Mason will meet with such patronage from the public as will enable him to test his method by an experiment on a large scale,

JOHN WILLIAMS."

Mr. Mason has written a small work upon the subject, and has a number of designs, illustrating his system and his observations, and experiments made during the past seven years. He proposes, during the coming year, to present his plan and to exhibit his designs to the leading scientific and commercial men of the principal cities. A. P. M.

Mr. Gough says we sometimes wonder at the incivility of railroad conductors; while if we could know all the petty annoyances to which they are subjected, and the silly questions constantly asked of them by ignorant, stupid and nervous people, the wonder would be that they can be civil at all. A man as nervous as Mr Gough, might say that, but a railroad conductor has no business to be nervous. His chief duty is to be polite, accommodating and agreeable to all classes of passengers, the ignorant as well as the learned, the ragged as well as those in the most expensive garb.

### Disputed Railway Fares.

THE EXTRA "ONE CENT" IN COURT.

Supreme Court—Circuit. Before Judge Peckham.

A case involving a claim originating in the refusal of a passenger to pay the extra one cent fare demanded by the city railroad companies came up for the trial in this court. It appears that on the 14th of October, 1844, and soon after the imposition of the government tax on the railway fares, Mr. John S. Jackson, a rather venerable looking gentleman, took passage in one of the Second avenue cars. The conductor, in collecting the fare, was tendered five cents by Mr. Jackson but demanded the additional cent, at the same time pointing to the printed and recently posted notices to the effect that the fare had been raised. The increase was refused, and an altercation ensued upon the attempt of the conductor tn eject Mr. Jackson. During this altercation the latter, as he alleges, was struck upon the nose by the former, and otherwise injured. The conductor, however, contended that the injury arose from the cane which Mr. Jackson, in his resistance, contrived to get across his face. The testimony on this point was conflicting. Finally the passengers interfered, and Mr. Jackson continued his journey in the car. He brought suit to recover the sum of five thousand dollars damages. The counsel for the plaintiff contended that the exaction of the extra cent demanded by the conductor, and which led to the difficulty, was an extortion, and that the act under which it was claimed was unconstitutional. The company obtained their chartered privileges from the State, and in their act of incorporation agreed to carry passengers for five cents. It was therefore a contract with the public which the present company violated in demanding a larger fare. Even admitting the right of the company to exact the government tax *per capita* from their passengers one cent was more than they were entitled to—the correct amount being one and one-quarter mills, and for the payment of this fraction the government has made no currency. For the defence it was contended that the passenger had refused to pay his fare, and under the law the conductor was authorized to eject him by the exertion or use of such force as was necessary so to do. The conductor had not transcended his powers in the attempt to eject Mr. Jackson. As to the extra cent the company submitted in evidence a copy of the act of Congress.

At the close of the evidence and the addresses the Judge charged the jury to guide their verdict by the consideration of the following matters of law:—The constitutionality of the act of Congress did not at all enter into the case. For all present purposes that act was obligatory upon the community, and, therefore, binding upon the parties to the present cause. The question then was, Did the plaintiff pay his fare? If he tendered only five cents, he did not. Now when a passenger does not pay his fare the conduetor is authorized by law to eject him, bnt in so doing to exert only the force necessary to effect that object. The attention of the plaintiff had been directed to the notices informing the public the public that the fare was six cents, yet he refused to accede to the demand. It was now a point to be ascertained whether the conductor had used more than the necessary force in the effort to expel the plaintiff. Upon the decision of this point depended the claims for damages. Even a weak man who assails a strong man, and in turn is beaten and injured by the latter, can recover damages; for the strong man is by law permitted to exercise only enough force for his own defence, and any excess subjects him to liability for damages. It was their duty, then, to find a verdict according to the facts; nor should the popular prejudice against railroad corporations influence them in their deliberations.

The jury after an absence of nearly two hours, returned unable to agree, but asked the instruction of the Court on the following points, the cause of their disagreement:—1. Whether the conductor had a right to eject a passenger if he did not pay the six cents? 2. Whether it would not have been more law abiding on the part of the conductor to call a policeman to eject the passenger?

His Honor charged them again that it was a sufficient reason for ejection that the passenger refused to pay more than five cents, and that he was personally authorized so to eject without calling a policeman to do so.

The jury, without retiring and after a few minutes' deliberation in their seats, returned a verdict for the defendants.—*N. Y. Herald.*

### St. Louis and Iron Mountain Railway.

The earnings and expenses of this road for the years ending October 1, 1863 and 1864, have been as follows:

| Earnings. | 1863 | 1864 |
|---|---|---|
| From passengers | $132,156 38 | $143,116 40 |
| From freights | 140,635 67 | 196,885 43 |
| From mails, rents, &c. | 13,195 46 | 11,480 70 |
| From U. S. troops | 33,066 56 | 11,820 79 |
| From U. S. freight | 95,857 84 | 38,988 02 |
| Totals | $120,911 91 | $399,291 34 |
| Expenses, viz: | | |
| Maintenance of roadway | $69,679 77 | $102,923 63 |
| Maintenance of rolling stock and machinery | 57,260 62 | 111,364 71 |
| Operating expenses | 134,747 63 | 153 674 24 |
| Totals | $259,688 07 | $367,962 58 |
| Net Earnings | $161,223 84 | $31,328 76 |

The net earnings of 1863 were appropriated as follows:

| | |
|---|---|
| To pay liabilities | $35,985 41 |
| To pay interest on State bonds | 40, 00 f 0 |
| To pay interest on St. Louis Co. bonds | 23,717 13 |
| To construction account for new cars station houses, machinery, tools, &c | 40,582 67 |
| | $161,223 84 |

Between the close of the fiscal year, (September 30,) and the annual meeting of stockholders (November 2,) the company paid into the State Treasury the further sum of $20,000, and into the County Treasury, for interest that matured on their Iron Mountain Railroad bonds in July of that year, $7,000, leaving to be paid the county in 1864, the further sum of $14,000—the company having adopted the policy of paying into the State Treasury, on account of interest on State bonds, all surplus earnings not needed to pay liabilities, or for supplying the wants of the road.

The above comparative statement of earnings exhibits a diminution in 1864, of aggregate business of $21,620 57. But as the receipts for Government service were less by $81,115 59, it follows that the legitimate local business had increased nearly $60,000, (say $55,000 from freights, and $5,000 from passengers.) The expenses on the other hand have been increased $108,274 51; which is solely attributable to the enormous advance in the price of all kinds of labor and material. In maintaining roadway, bridges and machinery, this increase is nearly double; but for operating the road, the expenses are only about 20 per cent above those of the previous year.

The company have 13 locomotives. Number of miles run, 280,189; in 1863, 292,019—decrease, 11,830. Through passengers carried, including U. S. troops, 9,772; do. way do., 383,862; in 1863, 22,468 and 332,409 respectively—showing a decrease in the former of 12,696, and in the latter an increase of 51-453. Number of passengers carried one mile, 4,547,272, a decrease, as compared with the previous year, of 503,247. Tons of freight transported, 96,951; in 1863, 99,943—a decrease of 2,992. Tons carried one mile, 5,-521,880—a decrease of 60,082. Troops carried one mile in 1864, 594,600; Government property, 900,000 tons. The expenses were 92 1 per cent of the earnings; in 1863, 61.7.

BALANCE SHEET.

| | 1863. | 1864. |
|---|---|---|
| Capital stock | $1,971,137 50 | $1 971,222 50 |
| State of Missouri b'ds | 3,501,900 00 | 3,501,000 00 |
| Net earnings at commencement of year | 278,813 70 | 440,037 54 |
| Gross earnings for year ending October 1 | 420 911 91 | 399,591 34 |
| Floating debt | 21,374 64 | 40,557 83 |
| | $6 193,227 75 | $6,352,109 21 |
| | 1863 | 1864. |
| Construction | $3,9 2,840 99 | $3,920 979 4 2 |
| Potosi Branch | 67,969 35 | 67,969 35 |
| Rolling stock | 358 811 78 | 360 029 10 |
| Discount and interest | 1 420,691 40 | 1,419 114 40 |
| Transportation expresses | 559,683 07 | 367 952 58 |
| Materials on hand | 29 135 01 | 58 014 65 |
| Cash | 52,846 87 | 62,159 97 |
| Bills receivable | 12,799 46 | 21 186 75 |
| U. S Government | 57,798 72 | 18,759 21 |
| Other assets | 70,643 10 | 56,933 88 |
| | $6,193,227 75 | $6,352,109 21 |

President and Superintendent, Stephen D. Barlow; Vice President, Carlos S. Greely, Ass't Superintendent, John Hewitt; Secretary and Treasurer, L. B. Clark.—*Am. Railway Times.*

### Iowa Railroads.

In 1864 Iowa had 816 miles of railway completed and their gross earnings that year were $2,533,7100. The State Treasurer thinks their earnings for 1865 will be increased fifty per cent. During the past year several of the roads have been slightly extended, and nearly all are making arraugements to go forward with them vigorously next spring. The Burlington & Missouri River road is now bridging the Des Moines near Ottumwa. The Des Moines valley road, has its track nearly completed to Monroe. The Dubuque & Sioux City road is open to Akley. The Burlington Hawkeye continues:

Through the central and eastern counties there is now an unusual interest in the North and South lines proposed, and the projects are very numerous. The Pella, Newton & Marshal town road, B. F. Roberts, President, of which a preliminary survey has been made. The Iowa Central, David Morgan, President, extending from the southern line of the State, by way of Centreville, Albia, Eddyville, Oskaloosa, Montezuma, Toledo and Cedar Falls, to the northern line of the State—designed to connect on the south with the North Missouri road, and on the north with the St. Paul and Southern Minnesota—a large porion of the route has been surveyed, and the contracts let for grading several seetions immediately south of Cedar Falls. The St. Louis & Cedar Rapids road, Mr. Angle, President, running from the Southern State line to Cedar Rapids by way of Bloomfield, Ottumwa and Sigourney, with efforts being made to deflect it to Iowa City and one or two other important points; this being also intended to connect with the North Missouri at the State line. There is another proposed route from Keokuk to Dubuque *via* Mt. Pleasant, Columbus City, Muscatine, Tipton and Anamosa. There is also road projected, and we believe it is now sharing the general revival, running east and west through the southern tier of counties by way of Keosaqua, Bloomfield, Centreville, etc. And also on the Missouri slope, an important line from Council Bluffs to St. Jo., Mo.

[From Civil Engineer and Architect's Journal. Dec. 1864.]

## Decay of Materials in Tropical Climates.

BY G. O. MANN.

The facts and experience recorded in this paper had reference particularly to the empire of Brazil, the author being the resident engineer and Locomotive superintendent of the Recife and San Francisco Railway Company. It was stated that the temperature varied less probably than in any other quarter of the globe; but the seasons, which it was believed influenced the decay of materials to a greater extent than the temperature were not so regular. Thus, the rainfall ranged from 60 inches to 120 inches per annum, and this did not occur at any particular period, though a certain peculiarity in the climate, excessive heat combined with much moisture, was noticeable more or less throughout the year.

It had been found on the Pernambuco railway, that the half round intermediate sleepers, of timber from the north of Europe, creosoted, were in a better state of preservation than the square sawn joint sleepers of the same material; still, after seven years' trial, it was evident that creosote, when properly applied to suitable descriptions of timber would prevent decay. In white-sand ballast, since the opening of the first section of the line in 1858, the half-round sleepers had not suffered a depreciation of more than one per cent, while the square sawn sleepers had experienced a depreciation of not less than fifty per cent. On the other sections of the line, sleepers of native timber were employed with unsatisfactory results; this was due, it was asserted, to the timber having been cut at unfavorable seasons, and to the sleepers having been laid in a green state, owing to the rapid progress of the works not allowing time for them to become dry. The author, after nearly seven years' experience, was confident, however, that properly selected timber of the country would be found more durable than any description of wooden sleeper yet imported. It was advisable, in order to prevent decay, to cut timber during the dry season, to select large and full grown trees, to remove the whole of the bark and sapwood, leaving the heart of the timber only, and not to expose the sleepers in the sun when fresh cut, but to stack them in open piles under cover, through and about which the air could freely circulate for a few months. The cost of such sleepers delivered at the stations on the Pernambuco railway was at present 2*s.* 7*d.* each, the scantling being 10 inches by 5 inches by 9 feet. Imported creosoted sleepers had invariably cost double that amount.

Respecting timber in general it was remarked that good timber for building purposes abounded in Brazil, in the greatest variety. Many kinds were impervious to the white ant, which insect generally selected the more porous descriptions, and particularly those in contact with the earth. In dry places, and with a free circulation of air, the white ant did not, in preference, select timber thus situated for its ravages; and it was found that the roofs of buildings, of good and well seasoned native timber, resisted for an indefinite period, both the climate and the white ant. Latterly it had been the practice to "pay" over, with coal tar, the ends of all timber built into the gables of buildings, or in any other position in which it was buried, or excluded from the air, and so far apparently with beneficial results. Two specimens were exhibited of the piles of the old Recife wooden bridge, which had been constructed in 1614, in proof of the durability of the native timber; and it was asserted that, with proper precautions, no foreign timber would be found able to compete in the tropics with that of native growth.

The only examples of iron bridges in the province of Pernambuco, except that of St. Isabel, completed in 1863, were those belonging to the railway. The result of a careful examination of four of these structures, after they had been erected six years, was to show that the cast iron pipe piles, forming the piers, wer likely to remain good for a considerable period; and that the upper structures of wrought iron would also last well with ordinary attention. The only parts apparently affected were the wrought iron bracings, and the bolts and nuts below high-water mark. With regard to the preservation of iron bridges, and of iron work in general, for the tropics, care should be taken to insure the iron being perfectly dry before the paint or any other composition was laid on. Coal tar had been found to afford a most efficient protection. It was advisable that all small pieces should, before being shipped, be heated to a low temperature, and then brushed with, and dipped in, tar; the larger parts should be well cleansed, and the tar laid on while hot. Where tar was objectionable, linseed oil might be applied in the same way, and over this there should be a thin coating of zinc paint.

With regard to building materials, stone, wherever it could be obtained at a reasonable price, should be preferred for the abutments and piers of bridges. Stone imported from Portugal, for facing the churches, and in a few old Dutch works of the seventeenth century, had been found to be very durable. Great caution was necessary in the selection of bricks, as those made near the sea board, with brackish water, were very susceptible to the weather, and mouldered away rapidly when exposed. As it was all but impossible to obtain thoroughly well-burnt bricks in large quantities, all brickwork near to the sea-coast required to be protected with plaster from the first, and in the interior this was ultimately necessary, or else a thick coating of lime whitewash might be given from time to time. Tiles made of similar, though where obtainable of better, clay, when well burnt, were scarcely affected by the weather, either on the seaboard or in the interior. Rafters were selected from young trees, and if of the proper quality of timber, had considerable duration. Laths were in nearly all cases made from the sap wood of "imberiba," perhaps the hardest and most durable description of timber im Brazil.

The permanent way keys, used for renewals since the opening of the Pernambuco railway in 1858, had been cut from native timber, of a remarkably close nature, which did not shrink, as the imported keys were found to do. The rails oxidized when left near to the sea-coast, so that it was desirable to remove them to the places where they were to be used as soon as possible. The motion of the trains appeared to prevent rust from forming on the rails, but owing to the high temperature they were always at during the day, and to the constant passage of the trains, there was tendency in them to become flattened. About 10 miles of the line had been laid with Greaves' "pot" sleepers, as to the durability of which in the tropics there could be no question, but they were found to make a rigid road, even in fine sand ballast. This portion of the line had been improved, by introducing fish plates, and suspending the joints. The railway carriages were made with a strong wrought iron under-frame; the body and the inside lining were of teak; and the outside panels were of papier maché. These carriages were in excellent preservation, after six years' work and exposure to the sun and rain.

In the appendix a list was given of those Brazilian timbers now being used for sleepers on the Pernambuco railway, and of such as were suitable for general purposes in permanent structures, as well as a table of the specific gravities of the kinds adapted for ship building.

## Pistons Without Packing.

When the first pistons to steam engines were made they were made tight by hemp gaskets—that is coils of hemp plaited with rope thoroughly slushed or soaked in hot tallow and subsequently driven in as tight as a man striking with a sledge could make them. It was a great step in advance when cast-iron rings were substituted for the hemp and steel springs inserted to keep the rings always up to the cylinder. Quite as much ingennity and thought have been expended on the pistons of steam engines as upon any other detail, and the variety in shape, form, and kind of packing would make an interesting study for the engineer if they were all collected in book form.

The piston of ocean steamers, for instance, have lighter springs than many small engines, and are not packed so tight, by many degrees pressure, in proportion to their areas, as some engines on land. There are few stationary engines in the country which will pass the centers with two or three pounds pressure on the gage, but there are plenty of steamboats that have engines which will do this with ease.

It was formerly the custom to pack locomotive cylinders with brass rings, which had a central lining of Babbitt metal let in. This also is done away with, and the largest works and the heaviest engines on the Erie Railroad, and others, for aught we know, have cast-iron rings.

In many instances pistons have been used without any packing in them—being simply solid disks fitting tightly, yet easily, to the bore. Some concession has been made to prejudices and conventional ideas by turning grooves in the solid piston and depending on the partial condensation of the steam to fill these grooves with water, and thus interpose an obstacle to the passage of steam between the piston and cylinder. It is probable that the evil of a leaky piston has been much exaggerated, for, although it will show on the indicator diagram when very much out of repair, it is a question whether any great amount of fuel is wasted by such a loss. There is no question, however, but that much damage is done to steam cylinders by bad packing, and many can testify to the scored and seamed cylinders that were made so by forcing in the springs.

Air pumps have been made for compressing air with solid pistons, and, reasoning from analogy, there seems no objection to making the pistons of steam engines of a moderate diameter of cylinder entirely solid; in fact, many are now working so made, and those who built them, as well as the owners, find no fault with their performance. On the contrary, rings are frequently a source of trouble, and, taken altogether, with their springs, followers and follower bolts, the piston with metallic packing is a costly detail. If lessening the cost of construction and retaining the vital qualities of any part is an important feature, then the pistons of small steam engines should be made solid.—*Scientific American.*

## RAILROAD ITEMS.

SUMMIT TUNNEL.—The Central Pacific Railroad Company of California have concluded to pass the Summit of the Sierra Nevadas with a tunnel about fifteen hundred feet long, as thereby the line can be kept down about one hundred feet lower. Chas. Crocker has gone to the Summit to locate and arrange for the construction of laborers' camps at each end of the proposed tunnel. Work on the tunnel will be commenced immediately and prosecuted day and night, with three shifts of workmen, until completed It will take about one year to finish it, by which time the company expect to have the iron horse there ready to pass through.—*Sacramento Union.*

The Central Pacific Railroad Company have been laying their plans for the operations of the year 1866. The surveys which have been in progress this summer have developed a better line over the mountains than was anticipated, and the Directors, after a full consideration of the work before them, have concluded that they can and will lay the track to the Truckee River next year. They have given the necessary orders to effect that object. If successful, it will be a great feat in railroad building.

The Marietta & Cincinnati Company are now arching the Pilcher tunnel, near Athens, Ohio. This tunnel, when completed, will be one of the finest and most substantial in the Western country. Nearly all the trestle work on the road is already filled with dirt, and the Marietta is becoming one of the most substantial roads of the country.

CENTRAL PACIFIC RAILROAD.—*San Francisco, Nov.* 8.—Governor Low and other commissioners appointed by the Government to examine the recently completed portion of the Pacific Railroad, extending from Newcastle to Colfax, 23 miles, have approved of the same and forwarded their report to Washington. When the report is endorsed by the Government, the company will be entitled to $1,100,000 in Government bonds. The company announce that the hulk of the work to Dutch Flat, nearly 80 miles from Sacramento, will be completed by December.

The Sacramento *Union* says the Central Pacific Railroad Company have four powerful freight locomotives now on the way to California, called Utah, Nevada, Humboldt and Truckee, and have four more in process of construction at the East, in addition to the one in San Francisco, which is nearly completed. Orders have been sent East for four others. When all these come to hand the company will have twenty locomotives ready for work. They are thus preparing for the next season's business, which will undoubtedly be very large, as the road is far enough up the mountain to secure the over mountain freight, and will be still farther eastward by the commencement of travel in the spring.

The stone in the Alps, where Mt Cenis tunnel is being excavated, is so hard that it fires at almost every blow. Mining is constantly resorted to, and we have an account of an explosion taking place by a spark struck from the rock by a workman while another was filling a hole with powder. The fire reached several other mines ready to explode, and two were killed, ten severely wounded, and others more or less hurt. The accident created a complete panic among all the men employed in the tunnel.

TOLEDO, WABASH AND WESTERN RAILROAD.—Mr. E. A. Chapin, late Superintendent of the Harlem N. Y. road, has been appointed Superintendent of the Western Division, extending from Springfield to the Mississippi River. His office will be at Springfield. Mr. T. L. Knapp has charge of the Middle Division, extending from Lafayette to Springfield, with his office at the former place. Mr. J. E. Baker is Superintendent of the Eastern Division from Toledo to Lafayette, with his office at the latter place. Mr. B. Andrews is Assistant Superintendent of the Keokuk branch, and will have charge under Mr. Chapin, of the road between Clayton and Keokuk.—*R. R. Gazette.*

A road is being constructed from Manheim to Lancaster, Penn., called the Hammercreek Gap and Lancaster Road. It is to be extended from Manheim northward through Hammercreek Gap to Pinegrove, and ultimately from Lancaster southward to Newcastle, Del., where coal can be shipped during any season of the year.

The people of Northeastern Indiana begin to feel as if they were cut off from the world, because of a deficient supply of railway facilities. Of course they must get uneasy before they will move in railway progress. This fast age demands fast people, and those who are slack must expect to live on the back lanes of life.

A large railroad meeting was held on the 14th at Leavenworth, at which Senator Lane made a speech and resolutions were passed in favor of building the Leavenworth, Lawrence & Galveston Railroad, and for the immediate construction of a railroad bridge across the Kansas River at this point.

A bill has been introduced into the Missouri Legislature, according to the recommendation of Governor Fletcher, authorizing such a change in the gauge of the railroads of that State as will enable them to operate in conjunction with roads out of the State without change of cars.

The Dubuque Times repels the charge that the Dubuque and Sioux City road is unreliable. That paper says that it is in as good a condition as any road in the country, and most all its detentions arise from the failure of the Illinois Central trains to arrive on time, and for which the D. and S. C. road generally waits.

LOUISVILLE AND NASHVILLE R. R.—Hon. James Guthrie, President of the above company was in Nashville last week to settle the affairs of the Company with the Commissioners appointed by the State. He proposes to pay off the entire amount of the State loan to the Company in State bonds.

An immense meeting was held in St. Louis to discuss the one cent additional fare, charged by the St. Louis Railroad Company. A statement of the net receipts for several months were read as follows:

| 1865. | Net receipts. | 2½ Gov. tax. |
|---|---|---|
| April | $18 400 | $460 |
| May | 23,080 | 577 |
| June | 23,000 | 575 |
| July | 24,000 | 600 |
| August | 24 500 | 612 |
| September | 24,120 | 603 |
| Total. | $137,000 | $3,427 |

The meeting also approved of the bill pending in the Legislature of that State, limiting the number of passengers per car to twenty-five. The companies have yielded to the popular indignation, and reduced the fare to the old price.

Johnson and Miami counties, Kansas, have each voted $150,000 to the Fort Scott road, which is to unite that place with Kansas city.

A den of thieves was discovered and the inmates arrested at Chattanooga, on the 16th. They had been chiefly devoted to theft from the trains Mr. Tinkham, agent of the N. & C. Company, stated that freight to the amount of $10,000 had been stolen during the past three weeks.

The Memphis & Ohio Road is in complete running order from that city to Stanton, 45 miles, and works two trains daily, bringing in from 150 to 200 bales of cotton daily. The northern connections will be completed in a few days.

The distance from Boston to Puget Sound by the route contemplated in connection with the Northern Pacific road is 3,646 miles; 1,782 to St. Paul, and 1,864 miles thence to the Sound.

Work on the Mississippi & Tennessee Road drags slowly, for want of funds. The citizens of Memphis loaned the company only $53,000, and they have repudiated part of that.

The Tennessee Legislature passed a bill authorizing the Governor to issue new bonds for the railroads of the State to the extent of the State endowments; also for the funding of the State debt as it matures, together with the interest in part due or to become due on the 1st of January, 1866, by the issue of new bonds.

Since the completion of the Pacific road to Kansas City, its business has increased enormously, and far beyond the capacity of its rolling stock. More cars are being hurried forward for its use.

Very strong efforts are being made to induce the Legislature to authorize the sale of the Southwest Branch of the Pacific Railroad to parties who will complete it at least to Springfield. A delegation are now at Jefferson City on this mission.

THE WHITEWATER VALLEY RAILROAD.—This road, first constructed as a branch of the Indianapolis and Cincinnati Road, to Harrison, is being extended to Brookville, Ind, where it will connect with the Indiana Central, and to which point it will be completed by the 1st of January, 1866.

The engineers are soon to start out to run two trial lines for the Alexandria and Fredericksburg road, one by the river and the other direct. Soon as the line is located the road will be put under contract.

By the first of next month it is expected that trains will traverse the entire line of the Tennessee and Memphis Railroad. The Tallahatchee bridge will not be completed, but arrangements for the transfer of freight will be made.

The contract to build a road from Marquette junction to Chocolate on Lake Superior has been let to Mr. C. F. Harvey of the latfer place, and it is to be completed by the 1st of next June. This is designed to extend and straighten the Peninsular road.

The Erie and Pittsburg road is to be immediately extended from Newcastle to Pittsburg.

The building of the "Capitol Railway at Springfield," Ill., has been commenced. It is to extend from the Great Western depot westward beyond the city limits.

The Southwestern people have hope that the Southern Pacific Road will be completed to the Texas line by the 1st of next April.

The two armies so thoroughly destroyed the wood along the Orange & Alexandria road, that it has been found necessary to adapt the engines to the use of coal.

An eastern paper says that switches should be so constructed that no carelessness nor distraction could convert them into death traps A chance for inventors.

The Kansas City *Journal* says work on the Cameron Railroad, connecting Kansas City with the Hannibal & St. Joseph Road, after a suspension of four and a half years by the war, is to be speedily recommenced and the road completed at the earliest possible time.

For several months, depredations have been committed upon property at the Union depot, Columbus, O., and three pardoned convicts arrested. In the room of one of them was found a trunk belonging to Miss Maggie F. Moore, of Urbana.

The Hamilton, Ohio, Telegraph reports 7,120 tickets sold at that station during the month of October, and supposing the same number were sold to that city, the gross amount of out and in travel by rail would be $16,347. This does not include half-fare nor commuter's tickets, which amount to a considerable sum.

The Union Pacific Railroad is now running construction trains fourteen miles west of Lawrence. A meeting of the directors was held in New York last week, and the following facts were developed. The road is graded 80 miles west of Omaha, and 20 miles more are nearly completed. The iron is being laid as fast as the weather will permit. The iron for 65 miles west is all at Omaha. Four locomotives are on hand and another is on the way, and seventy cars will soon be on the track. Sixty miles will be completed by the first of January, and a hundred by the first of July next. This will take the road half-way to Ft. Kearney. The company is in dead earnest to push the road.

The Russian Government has renewed its former contract with Winans of Baltimore, for keeping up the rolling stock on the St. Petersburg and Moscow Railroad.

Through trains have commenced running on the Memphis and Charleston Railroad.

Thomas L. Knapp, Esq., has the superintendency of the middle division, and E. H. Chapin, Esq., of the Toledo, Wabash & Great Great Western road.

The Minnesota Central was opened on the 15th, with a celebration at Faribault, its present terminus.

Five hundred men are employed day and night at the Chattanooga rolling mills turning out railroad iron.

It is the opinion of all the Canadian capitalists that the Northern Pacific road should be built on the American side of the frontier. The Grand Trunk, they think would form the eastern connection. A Boston paper says that the interest of Canada in this matter, is equally the interest of New England.

A railroad from Burlington to Fort Madison, Iowa, is talked of.

### Railroad Accidents for the Week.

James Sharp of the P. & Ft. Wayne road, while in the act of putting on a brake, slipped and the whole train passed over and crushed him shockingly. A freight train coming up, then caught the mangled remains and dragged them along the track some distance. This was near New Waterford, O.

The express train coming east on the Chicago and Rock Island road, was precipitated down an embankment, two miles east of Morris, turning six passenger and two baggage cars upside down. Two of the passenger cars were demolished. The locomotive and sleeping car escaped injury. Six persons were pretty seriously injured, but fortunately no person was killed.

On the 13th, the Alexandria railroad train backed into a city passenger car, striking and throwing it entirely off the track. Miss Marian Halton, of Philadelphia, who is a clerk in the Treasury Department, and C. J. Riddle, the conductor, were seriously, and Mr. Bayne, agent for the Adams Express Company, and others, slightly injured.

On the 14th another accident, caused by a misplaced switch, occurred on the Chicago & Rock Island Railroad, by which an entire train, except the engine and sleeping car, was precipitated down an embankment. Six persons were injured but none killed outright, although the coaches were filled with passengers.

On the 15th a railroad disaster occurred at Newark, New Jersey, by which two persons were killed and eight badly injured. The cause was the gross neglect of a switch tender.

On the 16th, Adam Massett, a carpenter, was struck by a locomotive of the Galena road, at Chicago, and killed.

On the 17th, an employe of the A. & G. W. road, was killed on the Jeffersonville, Ind. road, near Indianapolis, by falling between the cars, and a brakeman named Howard, was crushed while in the act of coupling cars on the Pacific road.

On the 17th, Cornelius Peterson was run over by the Chicago & Burlington cars at Round House Junction, about eight o'clock in the evening.

On the 18th, an unknown man was run over near the depot of the Michigan Southern road, and both legs cut off above the knee. He died shortly after.

A singular accident occurred last week on the Grand Trunk Road. While an express train was running at the rate of twenty-five miles an hour, the boiler of the locomotive exploded with terrific force and noise, and three of the cars were thrown off the track. A piece of the boiler, weighing four hundred pounds, was blown fifty rods. No lives were lost.

On the 14th a collision occurred on the Michigan Central near Albion, between a passenger and a freight train; but the danger was perceived soon enough to so slacken the trains, as to prevent any serious injury to persons, though demolishing both engines. An engineer and fireman were considerably bruised, but no bones broken.

On the 15th, four persons were killed in Chicago and vicinity, by being run over by railroad trains. The first was an elderly unknown man at the corner of South Clark and Sixteenth sts., by the Illinois Central engine. The next was at Bernadotte, on the same road, Joseph Cross being the victim. The third one, on the Chicago & Milwaukee Road, at Evanston, by which Frank B Dennison, a son of the conductor of the train, was run over, having both legs and one arm cut off. He expired in a few hours. He was twelve years old. The fourth victim was Adam Marsette, run over by a locomotive on the Galena Railroad, where Jefferson and Kinsie Stations intersect. Both of his legs were severed above the knees, and he expired in a short time.

A curious compiler has reported that within 29 days ending on the 10th, there were nine boiler explosions, by which 84 persons lost their lives. Four of them were locomotive explosions.

From the middle of October to date there have been 17 railroad accidents, of which 8 were collisions. In the same period, out of 14 fatalities to inland steamers, but four were collisions. Thirteen boiler explosions of various characters took place, of which four were to steamboats and three to locomotives. There were 41 ship and steamboat disasters, and 14 railroad "accidents" during October.

### MONETARY AND COMMERCIAL,

Money is easy to good customers, and the lines of discount are rather more extended than during the previous week.

We give a plan for specie payments, from the *Stockholder*, in another column, which is worthy of attentive perusal. The Secretary of the Treasury evinces a willingness to profit by suggestions, and the financial minds of the country should lend their aid in solving the great problem of resuming specie payments. It is a question which interests all classes, and more especially the poor, to whom a decline in prices is so vitally important.

There is hope of a searching reform in the Internal Revenue Department, when Congress meets. And if that body should do nothing more than settle the "currency" and revise the revenue duties, they will earn the gratitude of a long-suffering, but patient people.

It will be seen that gold has slightly advanced, this being the highest figure for some weeks.

| | Buying. | Selling. |
|---|---|---|
| New York | par@50c prem. | 1-10 prem. |
| Philadelphia | par@50c prem. | 1-10 prem. |
| Boston | par@50c prem. | 1-10 prem. |
| Gold | 146@146¼ | 147 |
| Silver | 138@140 | 141@142 |

There was a little improvement in New York in railway securities this morning, but they were about the same at the close this afternoon as yesterday. The quotations compare as follows:

| | Tues. A. M. | Wed. P. M. |
|---|---|---|
| U. S. 6 per cent. Bonds, 1881 | 105⅝ | 10[illegible] |
| " 5-20 " old | 101⅛ | 102 |
| " 5-20 " new | 99⅞ | 100 |
| " 10-40 " | 90⅝ | 91 |
| " One-year Certificates | 97⅛ | 97⅜ |
| 7-30s | 97⅛ | 97⅜ |
| New York Central | 90⅜ | 91⅛ |
| Erie | 91⅜ | 91⅞ |
| Hudson River | 108½ | 108⅝ |
| Reading | 114 | 114⅛ |
| Michigan Central | 115¼ | 115⅜ |
| Michigan Southern | 75⅞ | 77⅛ |
| Illinois Central | 133 | 133½ |
| Cleveland & Pittsburg | 93⅛ | 94 |
| Chicago & Northwestern | 36 | 38⅛ |
| " " pref | 66⅜ | 68 |
| Cleveland & Toledo | 102½ | .... |
| Rock Island | 108¾ | 108⅝ |
| Pitts., Ft. Wayne & Chicago | 104⅝ | 10[illegible] |
| Ohio & Mississippi Certificates | 29⅛ | 29½ |

The following are the earnings of the designated roads for the second week in November:

| | 1864. | 1865. | Increase. |
|---|---|---|---|
| North-Western | $146,551 | $177,417 | $30 864 |
| Michigan Southern | 93,211 | 113 352 | 20 141 |
| Detroit and Milwaukee | 33 062 | 40,352 | 7,290 |

The receipts of the Housatonic Railroad Company for the month of October were:

| | |
|---|---|
| 1865 | $46,232 04 |
| 1864 | 37,290 76 |
| Increase | $8,941 28 |

MARIETTA AND CINCINNATI RAILROAD CO.

Statement of approximate earnings for the first week in November, 1865:

| | 1865. | 1864. |
|---|---|---|
| Passengers | $9 420 10 | $8,135 80 |
| Freight | 15,940 10 | 11,621 96 |
| Mail, express and telegraph | 1,175 00 | 1,684 48 |
| Total | $26,535 20 | $20,442 24 |
| Total for the fiscal year, commencing January 1st | $1,029,454 78 | $857,158 76 |

Statement of approximate earnings for the second week in November, 1865:

| | 1865. | 1864. |
|---|---|---|
| Passengers | $9 336 45 | $9 407 24 |
| Freight | 16,117 25 | 10,650 30 |
| Mail, express and telegraph | 1,175 00 | 1 0-4 48 |
| Total | $26 628 70 | $21 142 02 |
| Total this month to date | 53,163 90 | 51,984 26 |
| Total for the fiscal year, commencing 1st of January | $1,056,083 48 | 878,300 78 |

The Michigan Central Railroad earned for the second week of November:

| | |
|---|---|
| 1865 | $104,136 38 |
| 1864 | 88,659 88 |
| Increase | $15,476 50 |

The traffic receipts of the Philadelphia and Reading R.R. for August, 1865, were $1,121,205, against $1,170,241 in August, 1864—a decrease of $59,036. The total net profit for nine months ending August 31, 1865, were $2,663,284, against $2,925,639 in the corresponding period of the previous year—a decrease of $262,355.

The Rock Island earnings the first week in November were:

| | |
|---|---|
| 1864 | $96,359 |
| 1865 | 67,383 |
| Decrease | $28,976 |

The Rock Island Railroad shows a decrease of $1,999 for the second week in November.

The following are the earnings of the Ohio & Mississippi Railroad line from Cincinnati to St. Louis, for October:

| | 1865. | 1864. |
|---|---|---|
| Eastern Division | $219 090 11 | $163,467 56 |
| Western Division | 153,518 47 | 114,538 48 |
| Total | $372,617 58 | $278,005 04 |
| Increase of 1865 over 1864 | | $94,611 54 |

Comparative earnings from Jan. 1 to Oct. 31 inclusive, 1865 and 1864:

| | 1865. | 1864. |
|---|---|---|
| Eastern Division | $1 820 526 34 | $1,583 778 28 |
| Western Division | 1,275,607 11 | 1,105,105 38 |
| Total | $3,096,133 45 | $2,688,883 66 |
| Increase of 1865 over 184 | | $407,249 79 |

The receipts of the Racine and Mississippi and Northern Illinois Railroads for the week ending November 7, were:

| | |
|---|---|
| 1865 | $13 840 04 |
| 1864 | 13,668 22 |
| Increase | $171 82 |

The following are the receipts for the week ending Nov. 14, of the Racine and Mississippi and Northern Illinois Railroads:

| | |
|---|---|
| 1865 | $14 521 57 |
| 1864 | 12,624 86 |
| Increase | $1,896 71 |

Receipts from Jan. 1 to Nov. 14:

| | |
|---|---|
| 1865 | $618,115 20 |
| 1864 | $512,234 47 |
| Increase | $105,910 73 |

The following are the comparative earnings of the Erie Railway for the month of October:

| | |
|---|---|
| 1860 | $1 466 387 |
| 1864 | 1,222 568 |
| Increase | $ 183,-19 |

The following is a statement of the approximate earnings of the Pittsburg, Fort Wayne and Chicago Railway during the month of October, compared with the same period of last year:

| | 1865. | 1864. |
|---|---|---|
| From Freights | $470,066 35 | $388,098 91 |
| " Passengers | 306,633 97 | 289,690 76 |
| " Express Matter | 13,562 60 | 5,210 00 |
| " Mails | 7 825 00 | 7 825 00 |
| " Rent of Railway | 7 0-3 33 | 7,083 33 |
| " Miscellaneous | 2,271 06 | 3,453 77 |
| Total | $867,393 31 | $701,351 57 |
| Earnings from January 1, to October 31 | $7,107,819 94 | $5,514,827 54 |

From January 1st to October 31st, the receipts of the Terre Haute & Alton road were $1,970,904, against $1,676,378 for same time in 1864—an increase of $294,526.

The October traffic of the Chicago & Milwaukee road amounted to $89,012, an increase of $10,131 over the same month last year.

The following is a statement of coal transported on the Delaware and Hudson Canal for the week ending Nov. 11, 1865, and for the season:

| | Week. | Season. |
|---|---|---|
| Del. and Hudson Canal Company | 27,810 | 633.107 |
| Pennsylvania Coal Company | 2,476 | 35.805 |
| Total tons | 30,286 | 668,912 |
| For the same period last year: | | |
| Del. and Hudson Canal Company | 17 416 | 775.301 |
| Pennsylvania Coal Company | 10,540 | 465 354 |
| Total tons | 27,956 | 1,240,655 |

The Pacific Mail Steamship Company has declared a dividend of 5 per cent out of the net earnings of the quarter ending October 31, payable on the 22d inst.

The estimated earnings of the Cleveland & Pittsburgh Railroad Company for the month of October, were:

| | |
|---|---|
| 1865 | $223 846 39 |
| 1864 | 248,292 66 |
| Decrease | $24,446 27 |

# RAILROAD OFFICES AND AGENTS.

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St.

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord, General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A. B. Waters, Freight and Ticket Agent, Cor. Third and Walnut.

**Ohio & Mississippi.**

W. E. Bruce, Freight and Ticket Agent, Gazette Building, 52 West Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J. R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg, Contracting Agent, Vine St. under Burnett House.
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent, " "

**Central Ohio & Pittsburg, Columbus and Cincinnat**

James E Shields, General Agent, No 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A. J. Day, S. W. Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burn House.

**New York Central.**

G. B Gibson, S. W. Passenger Agent. W. H. Page Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Pittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent. No. 5 East Front St

**Grand Trunk Railwny, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.

Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

## Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St Louis and Chicago Express... | 7:10 A. M. | 9:00 A M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express.. | 1' 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harris n..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city. ROB'T. MEEK, Superintendent.

T. B. LORD, Gen'l Ticket Agt

---

## BENJ. H. LATROBE AND C. H. LATROBE,

CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.

Through to Pittsburg without Change.

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

---

Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:10 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:40 A. M. | 10 40 P. M. |
| HAMILTON ..... | 9:57 " | 11:13 " |
| DAYTON ..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, } Passenger Agents.
CHAS. COOK, }

---

## CENTRAL RAILROAD

—OF—

NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Eas on with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:40 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:30 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg etc.

4 p m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

---

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.90; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex); 3:00 (Ex.); 12:15; 8:00 p m.

For Connecticut River Railroad, 8:00 a. m. (Ex); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 8:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

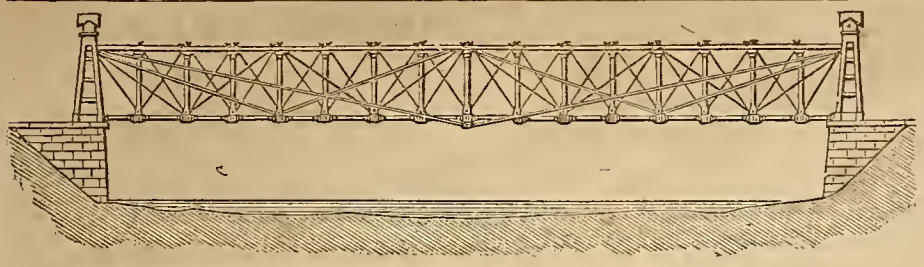
Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

---

NEW-YORK AND HARLEM RAILROAD Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



(*Plan of Bridge.*)

## FINK'S PATENT
## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,.

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

**HOLENSHADE, MORRIS & CO.**

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

**SCREW BOLTS,**

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

**M. W. BALDWIN & CO.**

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels: and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine, in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

**KNOX & SHAIN,**

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

**FINDINGS,**

AND

**MACHINERY,**

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

**BUSH & LOBDELL,**

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

**Chilled Wheels and Tyres**

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

**AMERICAN BANK NOTE COMPANY.**

***Bank Note Engravers & Printers.***

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

**SUPPLIES,**

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

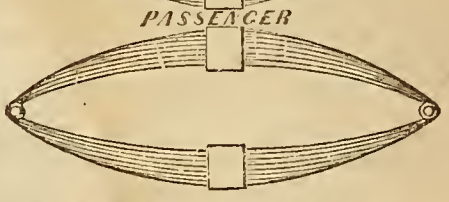
RAILWAY SPRINGS.

**FREIGHT**

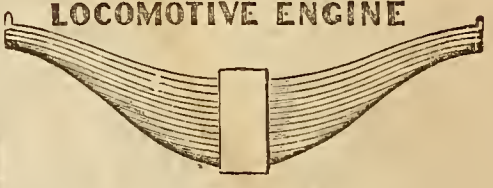




PASSENGER



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS,**

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

**Railroad Iron.**

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

W. M. F. HEWSON,

**STOCK BROKER,**

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collections.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new unning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition.*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation. Baltimore*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE. *Gen. Ticket Agent. Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞ Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞ Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 89 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street C. E FOLLETT, General Ticket Agent.

W. D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place anites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train eaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

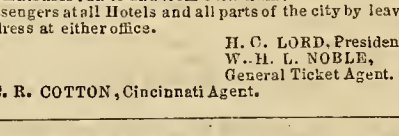
## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



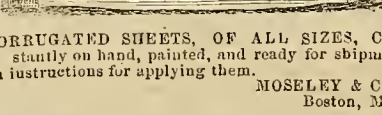
CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

## CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

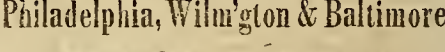
**Cast Iron Gas or Water Pipe**—1¼ to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!



## FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.44 P. M (Express

On Sundays, 10.24 P. M.

☞ Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, NOVEMBER 30, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

W. A. MUNSELL,
*General Agent.*


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| **LITTLE MIAMI.** | | |
| Cincinnati Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:00 P. M. | 4:00 A. M. |
| Morrow Accommodation | 5:30 P. M. | 8:00 A. M. |
| Night Express | 7:00 P. M. | 3:50 P. M. |
| Night Express | 10:00 P. M. | 9:40 A. M. |
| **MARIETTA AND CINCINNATI,** | | |
| Mail | 5:00 A. M. | 7:30 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P. M. | 5:45 A. M. |
| **CINCINNATI, HAMILTON AND DAYTON.** | | |
| Indianapolis & Cambridge City | 7:00 A. M. | 9:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:50 P. M. |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| Dayton Accommodation | 6:45 P. M. | 9:35 P. M. |
| Dayton, Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A. M. |
| Richmond & Chicago | 5:30 P. M. | 1:10 P. M. |
| **CHICAGO & GREAT EASTERN.** | | |
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " " | 5:30 P. M. | 1:20 P. M. |
| **INDIANAPOLIS AND CINCINNATI.** | | |
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Mail & Springfield Express | 2:00 P. M. | 4:30 P. M. |
| St. Louis and Chicago Express | 7:30 P. M. | 1:10 A. M. |
| Lawrenceburg and Harrison Accommodation | 4:30 P. M. | 8:30 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:20 P. M. |
| **CINCINNATI AND INDIANAPOLIS JUNCTION R. R.** | | |
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |
| **CINCINNATI AND ZANESVILLE.** | | |
| Mail | 9:00 A. M. | 4:35 P. M. |
| Caboose Accommodation | 4:00 P. M. | 8:00 A. M. |
| **KENTUCKY CENTRAL.** | | |
| Express | 6:00 A. M. | 6:30 P. M. |
| Accommodation | 1:50 P. M. | 11:00 A. M. |
| **ATLANTIC AND GREAT WESTERN RAILWAY.** | | |
| Morning Express | 9:40 A. M. | 6:30 P. M. |
| Night Express | 10:30 P. M. | 7:30 A. M. |

### The Fluctuations and Value of R. R. Stock.

Railroad Stock seems to be the peculiar subject of Stock gambling. While the war continued, gold was the great favorite with all the public gamblers. As a general principle, that is the best subject of gambling, which is the most *utterly uncertain*, and where the prospects of making great gains or losses in the shortest time, is the greatest. The reason is twofold; first, the excitement, (which is one of the main motives) is the greatest, while the result is the most uncertain; but, perhaps the great reason is, that if gains are made, they are on a large scale, and fortunes are soon accumulated. It is vain to tell these gamblers, that the chances are four to one against them. They care nothing for that, if there is any chance at all of *making a fortune*. That is the grand American idea of *enterprise*. While the war lasted, and *gold* was the ball played from hand to hand, by the great performers, it was truly an exciting play, and really, we can scarcely wonder, that habitual gamblers delighted in such a chance for play and fortune. But, the gambling in railroad stocks at this time, a little surprises us; for, in the last ten years, a great change has come over railroads. There is very little uncertain about railroads. The whole theory and practice of railroads is well understood, and there is one special feature of them which either is, or ought to be understood. This is, that *nine out of ten of all the railroads* in the country either *are, or will be profitable*. It was supposed, that at the termination of the war (the government having ceased its immense transportation,) the business of many railroads would fall off Just the contrary is the fact. The business of nearly all the Western roads has actually increased, especially of the lines going East and West, whose main business is to carry the freight to and from the West. These lines have all increased their traffic. Ten years ago, not more than one road in five was profitable; now there is not more than one in five which is not profitable, and even these promise to be so in time. In one word, railroad stocks are now, with very few exceptions, good investments. Indeed, we are persuaded that, at the present time, the best investments of money are now, — 1. Government Stocks. 2. Railroad Stocks. The reason is, that the former are now very low compared with their value; and the latter are paying good dividends, with the certainty of increasing them. Perhaps, we shall surprise the reader, but we affirm, and can prove, that many railroads have paid higher profits than any species of property in the country. Some of them have had old debts to pay; and some divided stock dividends, and some issued preferred stocks, which concealed the real rate of their profits; but, we know the fact, that there are several railroads which have made a *net* profit of 15 to 30 per cent. per annum; and there are many others which have made 10 per cent. The real holders of railroad stock should discourage, as far as possible this wild gambling, in a property which is as real and positive, as any in the country. This kind of dealing is against the good roads, and in favor only of the very bad.

We have seen in one of the daily papers, a statement of the prices of leading Railroad Stocks, since 1860, the year before the war. This table shows a most astonishing rise and fall in these stocks, independent of the value of gold. Notwithstanding most of them had a real, calculable value, which any one can estimate and understand; yet they have been made the foothalls of the stockbrokers. Now, what we would say is, let the stockholders in really good roads, and such are all who *make* over 5 per cent. profits, find from the *facts* of the road,—1. Just what the road is making, that is, the net profits, after deducting expenses from receipts, and calculate what per cent. that gives on his investment. 2. Calculate what is the capital which at a fair rate will produce that sum. *That* is exactly what his stock is worth, and unless he is driven to make sacrifices, he ought not to sell for less. If this were really done by stockholders, railroad stocks would be worth much more than they are, and there would be far less gambling in them than there now is.

### Railroads South, and Bridges over the Ohio.

We have spoken, in our article on the Steubenville Railroad, of the fine bridge over the Ohio at that place. We omitted to say that this bridge is a Railroad bridge only; and as such is a remarkably fine, substantial structure. The bridge now building at Cincinnati is *not* a railroad bridge. The bridge about to be built at Parkersburg will be a railroad bridge. There are two propositions we think very plain,—1. That railroads must, sooner or later, cross the Ohio in various directions; and — 2. That if they do, there must be bridges over the Ohio, where they cross. The old idea, that steamboats had the sole right to the Ohio is a great mistake. In the long run, railroads are of more importance than steamboats; but, in fact, there is no conflict between them. There are not more than three weeks in the year, in which a railroad bridge, built horizontally, twenty feet above high water, would interfere with steamboats; and for those three weeks, the boats should be constructed, as they can be very easily, *to lower their pipes*. But, a sufficient bridge for railroad purposes can be made, even for high water, without the need of lowering pipes. The bridge at Steubenville is 90 feet above low water; and sufficiently high for the passage of all steamboats used in that portion of the river. That bridge is built on a very good plan.

Let us now turn a moment to the direct

Southern Road from Cincinnati. This road must and will soon he made; but, it ought not to stop at the southern hank of the river; for that would require all freight for Cincinnati and the north, to he transferred, at great expense. All such transhipments are against the interests of railroads and the people; they shonld be avoided, when the direct road is made. This will he done hy another hridge at Cincinnati, which will be exclusively a railroad bridge. Such a one may be made near the mouth of the Licking. This hrings us to the direct Southern road, and the way to make it. Supposing this road to leave Paris, as a a point, it would he 170 miles to Knoxville. This, at $30,000 per mile (for which it can be constructed) is, say—$7,000,000. This is a very moderate sum for such an enterprise, and ought to he promptly raised. If half of it is furnished hy stockholders, the other half can be placed at any time in first mortgage bonds. The prohlem then is to raise $3,500,000. To do this, we have all the counties of Tennessee, and Kentucky, from Knoxville to Cincinnati; the City of Cinciunati, and all the railroad companies, whose business centres at Cincinnati. This last point is one we wish to have fully considered. It is very evident that no parties are more interested in a direct Southern road from Cincinnati, than the railroad companies on the north side. Suppose we are correct, iu statements heretofore made, that such a road connecting with Atlanta, would hring in all the trade of the South, which naturally would come to the West—and that is immense. Then it follows that a large part of that, prohably four-fifths, must be re-distributed (if Southern products) to all the points from Pittshurg to St. Louis, and thus carried over these roads; and if Northern products, carried over them *to* Cincinnati. This is so plain, that no one can fail to see it. Hencc, these roads are interested directly in getting a road from Cincinnati to Atlanta direct. Hence, they should exert themselves in its favor, and contribute largely to its stocks. In our next paper, we shall consider the superiority of the Southern Ports.

### The Hudson River Bridge.

The New York Central Railroad has for many years endeavored to secure a transit across the Hudson at Albany without the delays arising from the ice and re-shipment, and undouhtedly intended to purchase or lease one or both of the east side railroads to New York, thus making a through line from Suspension Bridge to New York, without change. The city of Troy, six miles abovc, through which, via the Schenectady hranch, trains now run, coming down the east side to East Albany, naturally ohjected to such an arrangement, cutting them off, and zealously fought first the tunnel project, and then the hridge, by protest and injunction, until the United States Circuit Court decided against them.

The structure, which is more useful than ornamental, is a drawhridge, and has gone slowly towards completion. Meanwhile, Commodore Vanderbilt has secured a controlling interest in hoth the east side railroads, and owns $800,000 in Central stock. If the Central carried out its original plan, they must huy their through line at Vanderbilt's figures.

To avoid this, a road is constructed from Schenectady to Athens, connecting *now* with the People's Line Steamhoats, and eventually with a series of roads now huilt or projected on the west side of the river, and which will undouhtedly he pushed through with Mr. Richmond's usual energy. Of course this does away with the hridge, so far as the Hudson and Harlem roads are concerned, and will lead to a very spirited contest hetween the Dean and the Commodore at the Company's election on the 13th.

### Railroads to the Pacific.

By special invitation ex-Governor Curry, of Oregon, and ex-Governor Fuller, of Utah, addressed the Boston Chamher of Commerce last Monday. In the course of his remarks Mr. Curry said:

We, of Oregon and the adjoining Territories, do not care, of course, how many railroads cross the contiuent, so long as the different plans do not interfere and retard the early construction of one on the northern route, which is the one we want. This also should be your own special choice, for it most assuredly will maintaiu and enlarge your commercial consequence. The northern route, connecting the waters of Lake Superior with those of Puget Sound, will constitute an international thoroughfare, answering the uses of the English settlements of Vancouver's Island, British Columhia and the far interior, and uniting on this side with the Grand Trunk line, you have a road that will supply the requirements of commerce, Government business and the populations of two distinct nationalities. There can be no terminus of any road so superior as that which Puget Sound affords — a magnificent inland sea which can hold in secure and capacious harborage the merchant marine and navies of every nation in the world. From Lake Superior across the mountains to and down the valley of the Columbia to Portland, Oregon, and thence to Puget Sound, you have a distance of some 2,000 miles. This is the route which nature has plainly indicated as the most direct and practicable, combining great natural advantages with those accruing from settlements and centers of trade along the line which are by no means insignificant With the exceptions, perhaps, of points where the route crosses mountain ranges, the soil is well adapted to agricultural purposes. Nature has heen so provident, it would appear, as to have made amends for any such deficiency, where the face of the country is hroken, by supplying superior grazing lands, or else vast deposits of the precious metal.

Will it become me to tell the "solid men of Boston" that the huilding of this road should he a New England enterprise? The products of the Pacific sections, the commerce of the Asiatic countries, are at your command. You can not he insensible as to their great value aud consequence. You can not reject the wealth and prosperity which a traffic so immense will bring you.

We quote from Mr. Fuller the following:

British and American railroad interests must always he reciprocal. The direct route from Canada to the Pacific is through United States territory. It is admitted to be impracticahle, if not impossible, to extend the Grand Trunk road north of Lake Superior into the 50th degree of latitude, and over the great natural barriers of that region. The direct line between the New England States and the Pacific is in like manner across Canadian territory. The outlet of the great Northwest, through the Canadas and through New England, would equally accommodate all interests.

The Columhia river, which will he the chief tributary of the Northern Pacific Railroad, (it was formerly the Oregon river,) has an average width of three-quarters of a mile, and is well adapted to navigation. Clear, blue, glassy, dotted with little islands—it is the Hudson of the Pacific slope, the most beautiful of all the great rivers of the Pacific coast.

Consider the relations of this road with Asia. The comparative nearness of the American and Asiatic coasts in the latitude of Puget Sound at once suggests the superiority of the Northern route. A trip from Victoria or Olympia to Japan will he much shorter than a voyage from San Francisco to China. This consideration greatly enlarges with our knowledge of the resolute determination of Russia as rapidly as possible to increase her commercial facilities on her Pacific coasts hoth in Asia and America.

The trade of Asia will be secured to us hy opening communication across the continent. The silks and teas of China, the spices and other products of India, the commerce of Japan and Australia, and the treasures of California, and of the Territories of the West and Northwest, would together find a direct route to the Atlantic coast and to Europe. The seven hundred million people of Asia and the islands of the Pacific would be reawakened to the importance of their commerce.

The extent of the business depending on the completion of the new route is very great; it is helieved the amount of it would not be less than five hundred millions. The diminished distances, averaging five thousand miles, and the quicker communication—would naturally give to America an immense advantage over Europe.

Baltimore and Ohio Railroad.—From a circular lately received from W. P. Smith, Esq., Master of Transportation, we make the following extracts:

We have, besides local trains, three through passenger trains daily in each direction, between Baltimore, and Wheeling, and Benwood, and two daily first class trains in each direction between Grafton and Parkersburg, connecting closely with two of the three trains hetween Grafton, and Baltimore, and Washington. Besides these, we have nine daily first class trains running on our Washington hranch line hetween Baltimore and Washington, three of which, in each direction closely connect at the Relay House or Washington Junction, (nine miles from Baltimore and thirty-one from Washington.) with the three through trains to and from the West between Baltimore and Wheeling, Benwood and Parkersburg. On all night trains we have first

class new sleeping cars, and on all the train first class new passenger cars, with every improvement for comfort and safety. We have just brought into use some twenty miles of new double track, in addition to that heretofore worked by us, and are rapidly extending this westward, so as to embrace the greater part of our road as soon as it can be built. We have new iron bridges built to substitute for all the wooden tressels or other temporary structures built or used during the war to replace those destroyed by the invader.

Besides fifty-five new splendid passenger coaches now in actual use on our road, we have fully thirty additional locomotives adapted to passenger service, so as to place us in equipment on an equality with any route in the country, and to give us a reserved power and capacity which will put us beyond all contingencies, and enable us to work our road with a success which must command for it a large share of public support.

Since the first of last July, fifty first class freight engines and two hundred freight cars have been added to our equipment, by which we are enabled to forward freights over the line with greater regularity and dispatch.

The Annual Report of this road has not yet come to hand.

---

CREDIT.—The article entitled "Progress of the Pacific Railroad," in last week's RECORD, should have been credited to the Report of the Chicago & Northwestern Railroad, for a copy of which we are indebted to its efficient and obliging Superintendent, GEO. L. DUNLAP, Esq.

The report itself is a most comprehensive and able resumé of the numerous roads now merged under the title of the Chicago & N.W. R.R., and is accompanied by a fine map of the Roads and connections, built and in progress.

---

PENNSYLVANIA STEEL COMPANY.—We are glad to learn, by an article in the *R. R. & Mining Register*, that the recent agitation of the applicability of steel to railroad purposes, has culminated in the formation of the above Company, which will probably be located at Harrisburg, in the immediate vicinity of superior ore for the manufacture of steel rails, etc.

The enterprise is mainly due to the exertions of President Thomson of the Pa. Central, who has been experimenting for several years with steel rails.

S. M. Felton, Esq., late President of the Phil., Wil. & Baltimore R. R., is President, and R. H. Lamborn, late Secretary of the American Iron and Steel Association, is Secretary.

---

### New York Central Railroad.

At the monthly meeting of the Directors of the New York Central Railroad Company, held on the 16th, the resignation of Hon. J. V. L. Pruyn, Treasurer of the Company, was received and accepted, and Mr. Edwin D. Worcester, who for several years ably filled the position of Assistant Treasurer, was elected Treasurer, and Mr. R. L. Banks, the present Secretary, elected Secretary and Assistant Treasurer.

(Correspondence Cincinnati Gazette)

### Cincinnati and the extension of the Central Kentucky Railroad.

I have already written two brief articles touching this subject, which have been published in your paper. With your permission, I shall be pleased to present a more extended, because more detailed veiw of the importance of this work. There seems no question that Cincinnati, and every railroad east, west and north entering there, are deeply interested in the extension of the Central Kentucky Road until the Southern system of railroads is tapped at some point, or perhaps at several points; and I repeat the suggestion that on Cincinnati and these roads mainly depend the outside inducements for a company to construct the road, and the more speedily the better. The people along the route will no doubt be as liberal, in proportion to ability, as Cincinnati. The Southern railroads cannot at present render much assistance. But they will be ready to give full efficiency to the great Central.

I do not desire to disparage any other route. It is not the way to present claims fairly. Let each be heard on their own merits, and be judged accordingly.

I would still urge the McMinnville & Chattanooga route for several reasons, and—

1st. Because it will present far the best route for a way business. From Lexington, Ky., to the Cumberland river it will pass through a country rich in agricultural productions. It will cross the Cumberland in the heart of the coal oil regions, indications of which already promise to supply any amount of business for the road from this source alone; all of which is now and will continue to be lost to Cincinnati on account of the extension of the Louisville & Knoxville road, unles the Central road is extended to the Cumberland. This river will also become a great feeder to the Central road, being readily navigable above to the South Fork, and below to Nashville.

After crossing the Cumberland the road will cut across a belt of splendid coal, iron and lumber lands, until it reaches into Tennessee.

Thus far on the route to Chattanooga, we find a rich way business—one that cannot be excelled anywhere. Further on as we go southward, this way business may be trifling comparatively; but the great thoroughfare begins to open out a grand prospect. Suppose between Livingston and Sparta, Tennessee, the road should send off two branches, one to Knoxville, or through Kingston to the Knoxville & Chattanooga Railroad. The other through Sparta to McMinnville. The first inviting a full connection with Virginia and North and South Carolina. The last drawing from Middle and West Tennessee, Mississippi, Alabama, etc. The main wide gauge to continue direct to Chattanooga, and there connect with all the Southern roads. Who so dull as to see that the central road with such feeders, and connecting such systems of roads, being an immense artery with such numerous branches, does not offer a magnificent inducement to capitalists? In this country it will be hard to find its equal.

When, however, we come to the construction of the road, the advantages of this route will be apparent. Prof. Schaffer, when surveying this route to the State line, several years since, informed me that for fifty miles south of Danville, the grading at that time would not cost exceeding $5,000 per mile. In the neighborhood of the Cumberland, he found heavier works, as is found at all other points crossing this stream near the mountains.

After getting into Tennessee, I understand this route has also the great advantages of the water courses cutting the mountains for it, instead of having them to cut directly across. Knoxville can no doubt be reached from Danville via Somerset and Jacksonboro, Tenn. To approach it by a more eastern route would cost far more.

*Chattanooga is the important connection for Cincinnati.* It is the most direct and the most complete southern channel. A more eastern connection will only give her the trade of East Tennessee and a very small portion of North and South Carolina. East of the mountains the trade will naturally seek a more direct seashore route. The southwestern travel, in this event, too, will follow the more direct Louisville and Nashville channels of trade. But give Cincinnati a broad gauge railroad to Chattanooga, and she will divide all southern trade and travel.

East of the Mobile & Ohio Railroad, there would then be but two great channels of direct Southern trade—Louisville and Cincinnati and Chattanooga. The Knoxville route *direct* would only divide a limited business with the Atlantic shore. The Chattanooga route would attract business to the Gulf shore—from Charleston to New Orleans.

Again, from Lynchburg, Va., to Florence, Ala., there is the best of mountain country, abounding in copper, coal, iron, marble and timber; having fine springs and unmeasured water power; a pleasant climate, unsurpassed for healthiness in the Northern States. It is a great wide backbone between the great food growing and cotton producing regions of our country, presenting the great desideratum for manufacturing success—the raw material, food health, market. In times past slavery has been in the way; henceforth that incubus will be banished.

What a prospect these indications open to Cincinnati! If she refuse to avail herself of them, what an immense kindness she will confer on Louisville! Louisville is in direct railroad communication with Memphis and with Nashville, and is now stretching another arm to Knoxville, shaking and offering to shake hands with the whole south. S. L.

---

### Railroads in Maryland—Washington and the West.

The people of Maryland only partially realize, as yet, the splendid development that awaits the State at the hands of foreign capitalists and by the aid of foreign enterprise, if not by their own. Whilst we are moving along with comparative quietness, slow, as it would seem, to comprehend the great future that is opening up for the State, the eyes of outsiders are eagerly scanning our natural advantages, our capabilities for the production of wealth, the extension of farming and trade operations; and unless certain of our own people bestir themselves, they will find ere long that others more discerning have seized upon the strong points, and will be doing what should be done by native capital and enterprise. The District of Columbia is a fair illustration of this to some extent today; almost every paying undertaking, such as horse railroads, lines of steamers, etc., being in the hands of sharp-sighted, earnest workers, who have made their appearance there from other sections since the war; men who, taking Washington, Alexandria and Georgetown at their very worst, and when property was deemed hopelessly depreciated, have inspired all those communities with new

life, and promise to make them soon such centres of trade and commerce as in the past was never dreamed of by the easy going set who nodded and slept over their fine natural advantages.

A correspondent of the *Pittsburg Commercial*, writing from Washington, first devotes considerable space in a late letter, to the remarkable success of the horse railroads established since the war, and comments afterwards on other projects for communicating more extensively with all points. According to this exhibit it is in contemplation to extend the Acquia Creek Railroad, which runs by Fredericksburg, and which has so long stuck fast sixty miles away from Washington, to the latter city; next, to build a railroad down the Peninsula, "to open up communication with Lower Maryland," a project mentioned some time ago in connection with the alleged plan to establish an extensive navy yard in the lower part of Calvert county. And speaking of the railroad advantages already possessed by our city, and the efficiency of their management, this writer says:

"A branch of the Baltimore and Ohio Railroad unites Washington with Baltimore. Baltimore is well provided with railroads running in all directions. This branch road between here and Baltimore has done an immense business during the war. In four years, including troops, the passengers carried over it have exceeded two millions. Besides this immense travel, the supplies, etc., for the army and the people of this city have nearly all been carried over the road I believe that the number of accidents causing loss of life have been but two in that whole period. This fact seems a grand compliment to the security of the road, and the efficiency of the officers, when we consider how appalling has been the loss of life by accidents on other roads, not only during but since the war.

"There is still another railroad which deserves attention in this connection. It is the short line to connect Washington with the West and Northwest. This road is now being accurately surveyed as rapidly as possible by a full corps of engineers, under Messrs Latrobe and Randolph. When completed, it connect the Washington and Baltimore depot with the main stem of the Baltimore & Ohio Railroad at Point of Rocks, Maryland, some seventy five miles west of Baltimore and forty-five miles from Washington. Thus Washington will be brought some forty miles nearer the West and Northwest than it is at present, and this distance will be much further shortened by the completion of the Connellsville Railroad, connecting Cumberland with Pittsburg and the entire West and Northwest through Pittsburg. When done, it is claimed, and upon good evidence, that this new and important line from Washington will be all that is necessary to establish full railroad facilities to and from the national capital, and will at once obviate the necessity for the additional road under the title of an 'air line between Washington and the North.' The work on the Connellsville Road is more than half done, as its whole length from Pittsburg to Cumberland is only about one hundred and fifty miles. The importance of these two new roads is not fully appreciated by the public They will form the very shortest possible time between Washington and the great West and Northwest, and bring Pittsburg, with its vast wealth of iron, coal and general commerce, and all the country beyond, about eighty miles nearer the American capital than at present. As the late decision of the United States District Court in favor of the road settles the points in law, we may safely predict a speedy resumption of labor on the unfinished end of the road, which, when completed, will be of such an immense interest, not only to the people of Pittsburg, but to all the West."—*Balt. Daily Com.*

### Wisconsin Railroad Statistics.

There are eight railroads with an aggregate length of track in the State of 1,631 miles. These are the Milwaukee & Prairie du Chien with 235 miles, Chicago & Northwestern with 220; Chicago & Milwaukee 40; Mineral Point 32; Sheboygan & Fond du Lac 20; La Crosse & Milwaukee 95; Milwaukee & St. Paul 275; Racine and Mississippi 68. The Chicago & Northwestern* Railroad Company in all has 828 miles of road, the Chicago & Milwaukee 85, and the Racine & Mississippi 144.

The number of through passengers reported to have been carried during the year is 280,205; of which the Chicago & Milwaukee Railroad carried 112,269; the Northwestern 52,170; the Prairie du Chien 16,233; the La Crosse and Milwaukee, 44,795; the Milwaukee & St. Paul 44,629; the Racine only 362. The number of way passengers was 1,622,688½; of which the Northwestern road carried 796,778; the Prairie du Chien 241,145; the Racine 172,842—the others a less number.

The rate of fare for through passengers varies from 1¼ cents per mile by the Chicago & Milwaukee road, to 5 cents per mile by the Mineral Point road, and of way fare from 3 cents by the Northwestern to five cents by the Mineral Point. The Northwestern charges the same rate for way and through travel 3 cents, being less than any other road for the former. The Prairie du Chien charges 3 36-100 cents per mile for through fare, and 373 100 for way fare,

The total amount of freight carried was 1,892,096 tons, of which 850,416 by the Northwestern, and 278,830 by the Prairie du Chien.

The amount received for transportation was $10,139,517,69; of this $4,995.777.40 by the Northwestern, and $1,680,368.55 by the Prairie du Chien. The total amount received for passengers was $3,044,045.50—of which the Northwestern received $1,523,543.09, the Prairie du Chien $509,712 78. The total receipts were $10,143,160.76.

There is no statement of the total expenses of the companies. Only 4 made dividends, the Prairie du Chien, Jan. 5th and July 22d; the Northwestern in June and December; the Chicago & Milwaukee July 1st; the Milwaukee & St. Paul Feb 1st.

There were 17 passengers and 21 employes reported killed and 11 passengers and 3 employes injured, mainly by their own carelessness—*W. R. R. Gazette.*

*A mistake.—This company *owns* 848 miles of road and holds perpetual lease of 82 more—making a grand total of 930 miles.—Ed.

☞ A correspondent of the Philadelphia Ledger recommends passenger cars of boiler iron and of oval shape, he says: A collision forcible enough to crush up a wooden car into fragments would have no such effect upon iron cars, and they would not slide into each other, even if the impact were strong enough to break through the iron if the car ends were square, instead of bending it. By giving the oval form to the car ends the structure would have the resisting power of an arch, or if the blow was the least out of a direct line, the car ends would *glance away* from each other.

### Rights of Railway Companies to Make different Tariffs.

A case was recently brought before the Supreme Court of the State of Maine, in error from a lower court, in which it was decided incidentally, that it is a reasonable regulation for a railway corporation to fix rates of fare by a tariff posted on their stations, and to allow a uniform discount on these rates to those who purchace tickets before entering the cars. A passenger, who has thus neglected to purchase a ticket, has no right to claim the discount, and if he refuses to pay to the conductor the fare established by the tariff, the conductor is justified in compelling him to leave the train at a regular station.

The facts of the case were substantially these: A passenger came into the cars of the Grand Truuk Railway Company without first purchasing a ticket, refused to pay the established rates, and insisted upon the discount of ten cents. The conductor finally ejected the passenger, who subsequently had the conductor indicted for assault and battery, and on the trial the conductor was found guilty. He appealed from the sentence, and Judge Kent of the Supreme Court reversed the proceedings of the lower court, thus granting a new trial. An abstract of the decision is copied below.

Railroad corporations have an undoubted right to fix and determine the rates of fare on their roads within the limits specified in their charters by existing laws, and to make reasonable regulations as to the time, place and mode of collecting the same from passengers. We see no reason to question their right to require payment in advance to be made at a convenient office and at convenient times, certainly if there is no positive interdict to entering the cars without a ticket. This is no hardship toward the passenger, who can ordinarily procure a ticket and pay his fare before entering the cars. But to the company it is important that such regulations should be enforced—in simplifying accounts; in promoting and securing safety, by allowing time to the conductor to attend to his proper duties on the train, which would be interfered with if his time were taken up in collecting and exchanging money and answering questions; and especially as a check against mistakes or fraud on the part of conductors, and as a guard against imposition by those seeking a passage from one station to another without payment.

No absolute rule of exclusion was established in this case. It appears that the passenger was requested to pay certain rates of fare established by the company; that these rates were the regular rates published in the tariff tables and posted in the stations of the company. But he says he was not bound to pay because by the same rules and tariff a discount of ten cents was made from the rates to those who purchased tickets before entering the train, which created two different rates of fare for the same passage.

If this were so we are not prepared to decide that it would be an unreasonable or illegal exercise of the power given to the corporation. Assuming that it is reasonable to require repayment and the production of a ticket, it would seem to be simply a relaxation of the rule in favor of the passenger to allow him to pass upon the payment of another rate slightly advanced. If he neglected to avail himself of the opportunity afforded to him to procure a ticket at the lower rate, he cannot complain if he is allowed to proceed on payment of the established rates for such cases, instead of being at once removed from the car.

In this case, however, but one rate, that reqnired in the cars, was established, a discount of ten cents being made if a ticket was purchased before entering the train. This passenger could have no claim for this discount, for if he knew of the regulation it was his carelessness; and if he did not, it was his misfortune which caused the neglect of this opportunity. No more could be reasonably required of the company than that these regulations should be posted up conspicuously in their stations. It would not be practicable to notify each passenger of their existence before entering the cars. If the regulation was reasonable notice had been given of its existence, it is not necessary to prove actual knowledge of its existence on the part of the passenger. The question is to be determined on the ground of reasonableness and power, and not on the ground of individual knowledge. —*Am. Railway Times.*

### English Railroads.

The London Review strikes severely at the English railway management as follows:

The truth is that railway traveling, with its noise, it smells, and its prosaic bustle is irksome to most people, and we have contrived in merry England to make it a perfect nuisance to the very class of passengers by whom the railroad is chiefly supported. In what country but this would the public have had to wait years and tens of years for the means of communication with the railway guard, when it is openly known that the want of such communication may at any time, nay, frequently does, imperil life and property? In what country but this would men consent to be huddled together in a dirty sheep pen, without a cushion to sit on, and with window-frames which rattle in their grooves until every passenger is deafened by the noise? In what country but this would the public encounter such risks, endure such unpunctuality, put up with such bad accommodation, and pay for this such exhorbitant fares? The cost of railway traveling in England exceeds considerably what is paid in France, Germany, or Italy. It is twice as expensive as in Belgium. For all this additional charge, what do we gain? Certainly not comfort! for, with all our Brittish notions of the word, our carriages are proverbially the worst appointed and dingiest in Europe. Nor do we derive immunity from danger; for the percentage of railway accidents is far greater here than on the Continent. Even the shareholders do not appear to reap any advantage from high fares, and many lines in France and Prussia are, on an average, more remunerative, in a commercial sense, than our own. Speed, certainly we can insure on most long journeys? but if it can be only insured by a corresponding sacrifice of personal safety, it can be hardly called a recommendation. We stand, in short, in the remarkable position of having been the first nation to adopt railroads for locomotion and the last to promote their improvement.

### A New Railroad Project.

A new railway is in contemplation between Cleveland and Chicago, called *The Cleveland, Fort Wayne & Chicago Railroad*, which it is claimed will be some twenty-five miles shorter than any line in existence between those cities. This projected road runs *in an air-line* from Cleveland to Tiffin, 78 miles, thence to Fort Wayne, 102 miles, and thence by an independent line to Chicago, 150 miles. It is also in contemplation to extend the line from Fort Wayne westward to connect with the Chicago & Rock Island Railroad at Morris; the leading idea of the plan being *to connect by a due East and West Grand Trunk road the railways of the Atlantic States with the eastern terminus on the Missouri River of the great Highway to the Pacific.* That portion of the line lying between Tiffin Fort Wayne, belonged formerly to the Tiffin Fort Wayne Railroad Company, but has been sold to the Cleveland, Fort Wayne & Chicago Railroad Company. It is graded, bridged and ready for the iron; twenty five miles of it, forming a link between the Fremont Indiana Railroad and the Dayton & Michigan Railroad, is under contract to be speedily completed—the iron having been already shipped. The Company has leased twenty-seven miles of the Fremont & Indiana Railroad, through which connection is made with the Cleveland & Toledo Railroad at Fremont; so that a portion of this new road will soon be in active operation.

### New Route of the Atlantic and Great Western Railway.

The Atlantic and Great Western Company intend to construct a branch road from Danville, a point six or seven miles west of Morristown, to Boonton and Paterson, connecting with the Morris and Essex Railroad near Newark. This will give more favorable grades and a much better line for the heavy coal and western business. The same company will also complete the double track from Hoboken to Morristown, and from Danville to Philipsburg. The work is to be begun at an early day, and pushed forward as rapidly as possible.

Instead of laying down a third rail over the road, as is generally done, where cars of two widths are run over the same track—one of the rails being used for all the cars—two new rails will be laid down over all the narrow gauge roads that have been leased. This will involve a large outlay of capital; but it will secure greater strength and durability, and render the roads less liable to accident in consequeuce of double wear on one of the rails.

It is expected that the alterations on the Morris & Essex Railroad alone will require the expenditure of at least three millions of dollars. The depots will be improved; new ferry boats are to be built, and much rolling stock bought. —*New York Evening Post, November* 15.

Racine & Mississippi Railroad.—The Racine (Wisconsin) *Journal* says that on the 18th ultimo, the Racine & Mississippi Railroad was sold at public auction by the United States Marshal, and was bid off by Mr. G. A. Thompson for the sum of $1,000,000.

This road will be consolidated with the Northern Illinois Railroad, under the title of the Western Union Railroad, for which purpose precedent agreements had been made. Together these roads complete a great through line, from Lake Michigan at Racine to the Mississippi at Savannah, and extending thence along the bank of the river to Fulton, Port Byron and Rock Island. As yet the extension is open only to Fulton, but is nearly ready for traffic to Port Byron where it will connect with a branch of the Chicago and Rock Island Railroad, and thus enter Rock Island city.

The future of such a road, says the New York *Financial Chronicle* is not obscure. Though literally enveloped by powerful competing lines, the road will be a success.

### Electric Telegraph.

Mr. George B. Prescott has recently published in the *Atlantic Monthly* a very interesting article on this subject, from which we augur well for our future communications with the Old World. As our readers are aware, the attempt to lay a cable across the Atlantic will be renewed next spring; and in the mean time active measures are being taken to connect the shores of Asia with our continent by way of the Pacific coast. This line will extend from California to the terminus of British America, a distance of 600 miles; then across Russian America 1,900 miles; and from Behring's Strait to the mouth of the Amoor River, a distance of 2,500 miles. The entire length of that line will be between 5,000 and 6,000 miles. The greatest obstacle to be conquered is the laying of a cable of four hundred miles across Behring's Strait. Information received since Mr. Prescott has written the article we allude to, leads us to believe that whatever other obstacles may be encountered, from surface, climate, or population, will be easily overcome. On the proposed route, timber is found everywhere in sufficient quantity and quality, and no hostility is expected either from the Indian tribes roaming the American soil, as they are accustomed to trade with the Hudson Company, or from the Tartars, who are subjected to Russian rule.

The Czar's government has promised to extend the Siberian telegraph from its present terminus, at Irkutsk, to the mouth of the Amoor. The Russian Government also propose to connect Irkutsk with Pekin, one of the capitals of the Chinese Empire, through which an American company, organized last year in New York, will commence very soon to lay telegraph wires, connecting all the important cities of that rich and populous region.

If the Russian Government fulfills its engagements, and if the difficulties to be met in laying the cable through Behring's Strait are successfully overcome, we may expect to have soon two lines connecting our continent with the Old World. Still, while we hope that the third attempt to lay a cable between Ireland and Newfoundland will reward the perseverance of the originators of the scheme, we are free to confess that we have more faith in the ultimate success and completion of the Western lines.—*Stockholder.*

A suit has been commenced in the U. S. District Court at Detroit, involving the title to real estate of great value in the town of Hillsdale, Michigan. It seems that the land of the town was formerly held in common by Joel McCallum and three others. In 1839 they platted the village, leaving in the center a triangular piece, along one side of which the railroad was expected to run. Subsequently McCallum had made a lithographic map of the village, on which the premises in dispute were marked "Railroad Square." The Railroad was build on one side of the plat, and a portion of it occupied by the company; the balance remaining in common. Subsequently the railroad was moved to another part of the town, and McCallum undertook to resume possession of the triangle, whereupon the village authorities took measures to restrain him, and hence the present suit. A case has already been decided in that State, wherein it was held that the designation on the plat of "Public Square," was not held sufficient to prejudice the title of the original owner. The case promises to be an interesting one.

### The Pacific Railroad from the West.

The *Tribune's* special, Mr. A. D. Richardson, writes as follows, under date of Sept 11;

Gov. Stanford and Judge Crocker of the Central Pacific Railroad, were kind enough to organize a pleasant excursion that I might see the progress of their great work. Cars already run from Sacramento 55 miles to the new town of Colfax, 2,450 feet above sea-level. There we took horses for twelve miles. Upon this little section of road four thousand laborers are at work—one-tenth Irish, the rest Chinese. They are a great army laying siege to Nature in her strongest citadel, moving upon her most difficult works. The rugged mountains look like stupendous ant-hills. They swarm with Celestials, shoveling, wheeling, carting, drilling, and blasting rocks and earth, while their dull, moony eyes stare out from under immense basket hats, in shape and size like umbrellas. At several dining-camps we saw hundreds sitting on the ground, eating boiled rice with round slender chop stiks as fast as terrestrials could with soup-ladles. Irish laborers receive $30 per month (gold) and board: Chinese $31 boarding themselves.

At Gold Run a six-horse coach awaited us. Our day's ride was up a graded winding road, commanding an endless sweep of forest and mountain, among graceful tamaracks, gigantic pines and pyramidal firs. We reached the summit, two hours after dark, when its wild, gloomy grandeur is far more impressive than by day. It is a boundless reach of mountain piled on mountain, all of solid, unbroken granite, bare, verdureless, cold and gray. Through the hitting night air we were whirled down the eastern slope for three miles to Donner Lake, blue, shining, and spriugled with stars, while from the wooded hill beyond glared an Indian fire like a great fiendish eye-ball.

The lake is named from Donner's party of sixty Illinois emigrants, en route for Oregon, snowed in here in 1846. Knowing nothing of the climate, they attempted to cross too late, and were imprisoned by inexorable Winter. The logs of one of their cabins, and stumps, ten or twelve feet high, of trees which they cut off at the snow-surface are still seen. Many ate human flesh, and about forty perished from starvation. Several yet live to tell their horrible story.

The next day we visited the surveyors' camps and a little lake recently christened "Angela" in honor of the sister of Thomas Starr King. It was like pic-nicing at the North Pole, for snow lined the higher ravines and icicles hung from the water tanks on the stage road. On this route last Winter, two laborers were engulpbed by a snow-slide. Seeing it approach, they stepped behind a tall rock but it buried them fifty feet deep. There in Spring, their bodies were found, standing upright, with shovels in their hands.

Only three tunnels are contemplated, their aggregate length about one mile The road is expected to cross the summit at a hight of seven thousand feet above the sea. The cost of the most expensive mile is estimated at $350,000. For several miles the track must be roofed, to slide off the snow. In the hotel parlor that evening ensued a long conference on routes. The flaring candles lighted up a curious picture. The carpet was covered with maps, profiles and diagrams, held down at the edges by candle-sticks to keep them from rolling up. On their knees were the managers and surveyors, creeping from one map to another, and earnestly discussing the plans of their magnificent enterprise. The ladies were grouped around them, silent and intent, assuming liveliest interest in dry details about tunnels, grades, excavations, "making hight" and "getting down." Outside, the night wind moaned and shrieked as if the spirit of the mountain resented this invasion of his ancient domain.

These are the distances across the continent:

| | *Miles.* |
|---|---|
| San Francisco to Sacramento (river)..... | 123 |
| Sacramento to Colfax or Placerville, (two rival routes—railroad) ..... | 55 |
| Colfax or Placerville to Virginia City, Nevada..... | 112 |
| Virginia to Austin..... | 175 |
| Austin to Salt Lake City, Utah..... | 378 |
| Salt Lake to Denver, Colorado..... | 596 |
| Denver to Atchison, Kansas..... | 652 |
| Atchison to New York (railroad).....1,453 | |
| San Francisco to New-York.....3,504 | |

### A New California Railroad.

Certificate of Incorporation.—Stockton and Copperopolis Railroad. — A certified copy of articles of incorporation of "The Stockton and Copperopolis Railroad," filed in the office of the Secretary of the State, has returned from that office. The object of the company is to build a railroad from this city to Copperopolis, along the route surveyed in 1862, as near as practicable—the distance not to exceed forty-eight miles. The incorporators, intend, however, to view the route and shorten the road about twelve miles. The term of existence of the incorporation is fifty years, and the capital stock of the company is a million and a half dollars, divided into fifteen hundred shares of $100 each. The number of directors is nine, who hold office until their successors are duly qualified. The commissioners designated to open books of subscriptions for the stock of said company are T. G. Phelps, W. A. Dana, Austin Sperry, T. R. Anthony and W. F. McKee. The following named gentleman are officers of the company: E. S. Holden, President; H. H. Hewlett, Vice President; C. T. Meader, Treasurer; George Gray, Secretary. Directors: C. T. Meader, E. S. Holden, T. G. Phelps of San Francisco, T. R. Arthony, W. A. Dana, of San Francisco, H. H Hewlett, W. F. McKee, Austin Sperry and George Gray. The incorporators are men of energy, and there is no douht hut a railroad so much needed as hetween this city and Copperopolis will soon be commenced and the work speedily completed.—*Stockton Independent.*

Railway Progress in India.—A marvellous illustration of the progress now taking place in India, is supplied by the railway statistics. The annual official holiday, known as the Doorga Pooja, begins on the 25th Septemhe-, and lasts about a fortnight. On the 15th of August, the great Jumna bridge near Allahabad, was opened to the through traffic, reducing the delay between Calcutta and Delhi two hours. The East India Railway Company offered holiday-makers return tickets available for three weeks between the two capitals—English and Mussulman—for £7 second, and £12 first class, and each may take two servants at £2 2*s* a head, hesides luggage. The distance both ways is 2,040 miles! Moreover, the superstitious Hindoo is tempted to visit his holy kasi, Benares, by the offer of a third class ticket for £1 4*s*., a distance botb ways of 1,081 miles.

### Krupp's Steel Tires.

Mr. Thomas Prosser, civil engineer, has issued a pamphlet relative to the steel manufactures of Mr. Krupp, of which he is agent. We extract the following interesting facts from it:—

"Mr. Winslow (master mechanics of the Housatonic Railway) states that the *Reindeer* weighing 45,054 lbs., ran 72,483 miles, with an average wear by abrasion of 3-16″, on a set of 4 of Krupp's cast steel tires, which were 57.75 inches diameter when they commenced running, were 57.375 inches diameter when they had run these 72,483 miles; the average widtb of the wear of each tire was 2¼, which gives 87 lbs.=1.49 lh. per thousand miles for a 25-ton engine. as the amount of wear by abrasion only. The wear by abrasion of the puddled steel tires on the *Luxemburg*. we have seen, was 4.117 times as much as Krupp's cast-steel ones, and we are quite certain that iron ones wear much more. Hence we assign 358 lbs. for loss of metal by mere abrasion of puddled steel tires in running 60,000 miles—6.14 lbs. per 1,000 miles with a 25-ton 4 wheel locomotive, while a former statement makes the loss of iron tires 7,217 lbs. for the same service." —*American Artisan.*

The Brazilian Railroad.—We have had the pleasure, says the Lynchburg Virginian of meeting a day or two ago in this city, with Mr. Hurrah, of the firm of Roberts, Harvey & Co., the contractors of the great Don Pedro II. Railroad. These gentlemen, it will be remembered by many, undertook this gigantic work in 1856, and after the display of great energy and perseverance, have completed their contract. The work is finished from Rio Janeiro to the mouth of the Pirahy river, about one hundred miles—there the road branches, and is to run up and down the Perryhiba river, one hundred miles each way, penetrating the coffee districts and the diamond regions. This road is the heaviest work on the American continent. There are thirteen tunnels in seventeen miles distance, and the track crosses the Brazilian mountain at an elevation of eleven hundred and fifty (1,150) feet. The tunnel at the summit is seven thousand two hundred (7,200) feet long. The survey was commenced in October, 1856; the contractors commenced work in 1859, and the road was finished in July, 1864. It is understood that the contractors, Messrs Roberts, Harvey & Co., have made a large amount of money by this contract.

The first corps of engineers on this great road were nearly all from Lynchburg, and left here in 1856 for the distant scene of their labors.

The Broad Gauge in England.—We learn from authoritative sources that it has been settled, that the broad gauge of the Great Western (7 ft.) line is to be gradually abandoned This is a step in the right direction. The genius and talent of Brunel even is powerless to perpetuate so great a blunder as the seven feet gauge. The united testimony of the best engineering talent of all countries is that no width of gauge over five feet is necessary. We should most heartily rejoice to see this widtb of gauge the universal rule in the United States. The evils of a break of gauge have forced themselves upon the business interests of the country strong enough for it to insist upon some compromise insuring uniformity. The mechanical and economical questions all favor the five feet gauge, and likewise favor an uniform gauge.—*Am. Railway Times.*

## RAILROAD ITEMS.

☞ The Indianapolis & Cincinnati Railroad will change the time of their evening train on Monday last, November 26, leaving at 7:30 P. M., instead of 5:15 P. M. Passengers arriving by the evening trains on the Little Miami and Covington & Lexington Railroads, will connect with the trains for Lafayette, Chicago and all western towns and cities.

Iowa Railroads.—The following are the round numbers of the earnings of Iowa railroads for the past year, as reported to the State Treasurer:

Keokuk, Mount Pleasant & Muscatine, $66,000.
Des Moines Valley, $318,000.
McGregor Western, $52,000.
Mississippi & Missouri, $693 000.
Dubuque & Sioux City, $398,000.
Dubuque & Southwestern, $64,000.
Chicago, Iowa & Nebraska, $425,000.
Cedar Rapids & Missouri River, $236,000.
Burlington & Missouri River, $390,000.

The shortest of these roads is 25 miles, and the longest 166.—*West. R R. Gazette.*

☞ We understand that the contract has been let to Mr. C. F. Harvey, of Chocolate, for building a railroad from Marquette junction to Chocolate, on Lake Superior, a few miles from Marquette, to be completed by the 1st of June next. This is an extension of the Peninsula Railroad, which will straighten the route from Escanaba to Marquette, and save change of cars. This is a matter of great importance, not only to the Lake Superior country, but to all doing business with that region. All freight now has to be transferred from the Peninsula Railroad to the Bay de Noquet & Marquette Railroad, which latter road has sufficient business to employ all its rolling stock without taking the trade from the Bay shore to Marquette. The new road will, as we said before, straighten the route, and will cut off many miles of the distance.—*Green Bay Advocate.*

☞ The Tribune's Washington dispatch says, when the war ended in April last, the Government owned and used for military purposes, 330 locomotives, 4,000 cars, and 70,000 tons of iron. All the locomotives have now been sold but thirty-two, and there are about 1,000 cars yet on hand. Some have been sold for cash auction, and some on six months' and two years' time, to Southern railroads. All will be sold before January 1.

☞ The following officers of the Vicksburg, Shreveport & Texas Railroad have been elected: Wm. M. Modley, President, H. M. Bay, Vice-President, and Joseph F. McGuin, Treasurer and Secretary. The road was built 80 miles, but it will require $600,000 to reconstruct it, and pay interest due. The liabilities of the road for stock, funded and floating debt amount to $2,503,529 82. The assets are as follows:

| | |
|---|---|
| Eighty miles of road, valued at | $2,196,537 00 |
| About $50,000 acres of land | 2,200,000 00 |
| Debts due the company | 53,984 86 |
| Estimated assets | $4,450,521 86 |

The directors can not command the means to put the road in running order, and efforts are being made to organize a new company with capital to restore the road already built, and complete the whole line.

☞ The Minnesota road is completed to Shakopee.

☞ The Railroad committee reported to the Tennessee Legislature last Friday, on the condition of the roads in that State, which were chiefly built by State bonds, and recommended the passage of an act granting sufficient aid to put them in working order. The committee report that the Memphis & Ohio road owes the State $1,896,110, which is at the rate of $14,474 per mile; the Memphis, Clarksville & Louisville road, $1,354,000 at the rate of $16,316 per mile; the Nashville & Northwestern road, $1,847,400, at the rate of $14,102 per mile; the Edgefield & Kentucky road, $845,000, at the rate of $16,568 per mile; and the McMinnville & Manchester road, $451,000 at the rate of $12,558 per mile. The act recommended proposes the following additional appropriations:

| | |
|---|---|
| Memphis & Ohio R. R. | $300,000 |
| Memphis, Clarksville & Louisville, R. R. | 400,000 |
| Edgefield & Kentucky R R | 80,000 |
| Manchester & McMinnville R. R | 100,000 |
| Nashville & Northwestern R. R | 300,000 |

Which bonds shall bear date of January 1st, 1856, and be payable January 1st, 1892.

☞ The equipments of the entire line of the Louisville & Frankfort and the Lexington & Frankfort railways consists of 14 locomotives, 13 pasenger, 5 baggage, and 214 freight, stock, platform, etc., cars. Total mileage of engines, 236,061. Tons of freight carried during the year ending June 30th, 58,259; do., carried one mile, 3,445,402. Passengers carried, 231,855. Total mileage of passengers, 7,258,019. Compared with 1864 the gross earnings show an increase of $170,184 86, with an increase in expenses of $176,577 67.

☞ The project of a railroad from Oshkosh via Ripon, to Portage city, and thence to some point south-west on the Mississippi river, is being earnestly agitated in the northeastern portion of Wisconsin. Green Bay, Oshkosh and all the Wolf river pinery regions are deeply interested in it, as such a road would furnish a new and extensive market for lumber, while it would secure the shipment of a large amount of wheat and other produce from the central portions of the State via Green Bay.

☞ A meeting was last week held in Schenectady to prepare a notice for an application to the Legislature for a loan of $1,500,000, and a donation of 100,000 acres of land belonging to the State, to aid in the construction of the New York Northern Central Railroad across the northern wilderness at some point on the St. Lawrence river to connect with the Athens Railroad at Schenectady, which will be in running order in a few days.

☞ The decision of the Court of Appeals in the suit of the corporation of New York against the Third Aveuue Railroad Company for license, the Company having refused to pay the sum of $50 a year imposed by the city ordinances as the license for each car run, or pay a penalty of $50 for each case of refusal, is to the effect that the city having made a special agreement with the Third Avenue Company, which company was authorized and compelled to run cars over its route in numbers to accomodate the public, had no right to require any license to be taken other than the Company was compelled to sustain.

☞ The receipts of the Morris & Essex road, which the A. & G. W has leased, for the present year, will amount to $800,000 on the trade and travel between New York and Hackettstown; and when it shall be completed to Phillipsburg its receipts are estimated to exceed $1,500,000 for the ensuing year.

☞ The Commissioner of Internal Revenue decided as to the amount of stamp duty on a deed of trust and mortgage, given by the Atlantic & Great Western Railroad Company to John R. Penn, trustee of the city of N. Y., banker, in answer to an inquiry if $1,000 in internal revenue stamps was sufficient to cover the same, the entire amount of mortgage being $30,000,000, that it would require internal revenue stamps to the amount of $30,000, and that if said stamps were not affixed thereto, the bonds of said railroad company would be invalid.

☞ The stockholders of the Hempfield road between Wheeling and Washington, Pa., are determined to do something for it. It is now confined to the local trade. About $4,000,000 are required to complete it to Greensburg, where it would connect with the Pennsylvania Central; $2,000,000 to complete it to Pittsburg, and $2 500,000 to complete it to Union town, where it would connect with the Connellsville road.

☞ Mr. S. Howland, commissioner of the Northern Pacific road, has addressed a letter to the Toronto Leader, setting forth the temptations to Canadian and English capitalists which that enterprise affords. He thinks it would do more to make the hundred millions in Canadian roads, which are now profitless, yield a good income, than all other influences combined.

☞ A meeting was held in Syracuse last Wednesday, at which the towns along the route were largely represented, to consult about a railway project for connecting that city with Newburg. D. C. Littlejohn was the principal mover. He set forth his favorite idea, that Oswego is the natural gateway from all creation West to East, and there must be a grand trunk extending thence to tide water.

☞ The United States Railroad & Mining Register, thinks it is certain that a railroad will be built from Charleston on a route about midway between the Ohio River and the Alleghany mountains, across the central counties of West Virginia to the Baltimore & Ohio road, near Grafton.

☞ The terms of sale of the Mississippi & Missouri Road to the Chicago & Rock Island Company are:

1st. Payment of $5,500,000 for absolute ownership by the Chicago & Rock Island Co.

2d Payment to bondholders of the 1st class, 100c on the dollar; 2d class, 75c; 3d class 70c, and 4th class 62½c.

3d. Payment to stockholders the amount of 16c on the dollar.

The transfer to go into effect January 1, 1866. But the sale has been enjoined by some of the stockholders who are dissatisfied with the arrangement.

☞ Many railway travelers in England now carry keys to lock and unlock railway carriages, so that they may let themselves out in cases of great emergency, and lock themselves in. The keys carried by some noblemen and gentlemen are made of silver.

☞ The President has appointed Gen. R. C. Curtis, of Iowa, Wm. Prescott Smith, of the Baltimore & Ohio Railroad, and J. H. Simpson, of the U. S. Engineer Department, Commissioners of the Kansas Branch, Pacific Railroad.

☞ The Winchester, Ill, Democrat says that a vigorous movement is on foot to revive and complete, at an early day, the St. Louis, Alton & Rock Island Railway.

☞ Light Railroad Locomotives.—Mons. M Menette, a Parisian engineer, proposes to lay light rails on a narrow gauge—about 40 inches—on the sides of the old highways; and to work on them with small locomotives of 4 to 5 tuns, or with horses in some cases. His plan seems much like what has been long in practice here with horse-power, and for some years with dummy cars, and more recently with small traction engines, of Messrs. Grice & Long's construction.

☞ The Central Pacific Railroad has suffered severely by the caving in of embankments The mining districts have received considerable damages by the washing away of dams, flumes, wheels and bridges. Much of the country bordering on the Sacramento and Feather rivers, is flooded.

☞ A good story is told of a recent smash up on a Western railroad. A soldier who, in coming from Baltimore to Rock Island, had met with four accidents, was on this occasion in the car that completely turned over. Making his way through a window, and gaining an upright position, he looked around him and coolly inquired: "What station is this?"

☞ The Sacramento Union says the Central Pacific Railroad Company have four powerful freight locomotives now on the way to California, called Utah, Nevada, Humboldt, Truckee, and four more in progress at the East, and one in San Francisco nearly completed. Orders have been sent East for four others. With these the company will have twenty locomotives ready for work.

Gigantic Project. — A company is now being organized in St. Louis, to purchase the south-west branch of the Missouri Pacific road, and extend it to the Texas boundary, there to connect with the Texas Central road. The whole line would unite St. Louis with Galveston, the distance being 900 miles.

☞ The Omaha *Republican* says the Pacific Railway Company run out two construction trains daily from that city. The present force put down one mile of iron per day! The number of men employed is about 600. Ties and iron sufficient for sixty miles are on hand.

☞ The Nashville & Chattanooga road is said to be now in fine condition, and the recent connection of a break in the road has brought upon the track 71 cars and 17 locomotives that have long been detained at Rutledge, Ga.

☞ The Southern Michigan is out of debt, and for two years has paid ten per cent. on its guaranteed stock, and for the past year seven per cent. on its common stock.

☞ On the Jackson, Lansing & Saganaw road, the grading is done between Jackson and Mason and the iron laid down; and it is probable that by this time the trains are running between these points.

☞ The people of Davenport, Iowa, have opened the campaign in behalf of a ship canal from Rock Island to La Salle, Ill, for the purpose of connecting the Mississippi with the lakes.

☞ The Morris & Essex extension is completed, and a coal train passed from the Delaware to the Hudson on the 21st. Passenger trains will soon be operated.

☞ The locomotive engineers of the New York roads propose to give a grand festival in Syracuse on the 20th of December for the benefit of widows and orphans of deceased engineers.

☞ The Zanesville *Courier* renews the subject of a road to Millersburg. Stock books for this road under the corporate name of the Cincinnati, Zanesville & Cleveland Railroad Company were opened at Cincinnati last summer.

☞ A collision occurred on the Middle Ground between trains of the C. & T. and T. W. & W. railroads on the 20th inst. Considerable property was destroyed, but no person badly injured.

☞ The Great Northern railroad in England is about to introduce a system of consuming the smoke of the locomotives, and thereby at the same time, manufacture the necessary gas for lighting the trains.

☞ Seven new sleeping cars have just been put upon the Erie Railroad. They are represented as being magnificent affairs — perfect "palaces on wheels."

☞ The railroad bridge over the Mississippi, has been located just above Dunleith, with its west end at the foot of Seventh street. Dubuque.

☞ The British railway capitalists have arrived safely home and express themselves much pleased with the results of their visit to this country.

☞ The track of the Northern Pacific R. R. is laid within eight miles of Topeka, Kansas, and the grade is nearly ready for the iron as far as the depot in that town.

☞ Five miles of iron for the Atchison & Pike's Peak Railroad, have arrived at Atchison, and will be laid at once.

☞ The St. Louis, Jacksonville & Chicago road has been completed as far as Jerseyville, Ill.

☞ A resident secretary, to represent the English capitalists in Minnesota railways, is on his way to that State.

☞ A survey of an air line from St. Paul to Winona shows the distance to be 100 miles.

☞ The Erie road has got out its winter time table. Five through trains daily, three of them express.

☞ The Cleveland & Toledo road unable to manufacture all the passenger cars it needs, has ordered several from Troy N. Y.

☞ The people of Wooster, Ohio, are endeavoring to get a rail communication with the Atlantic & Great Western.

☞ The citizens of Paducah, Ky., are agitating the building of the Paducah & Vincennes Road.

☞ It is supposed that Louisville must soon wake up to the importance of completing the Lexington and Big Sandy Railroad.

☞ The Richmond & Danville Railroad Company have resolved to gradually substitute white for negro labor on that road.

☞ The Tennessee Legislature has revived the charter of the Chattanooga & Cincinnati Railroad Company.

☞ Contracts for constructing the extension of the Lehigh Valley road have been awarded.

☞ The shops at Fond du Lac, Wis., are to turn out one car daily for the next hundred days.

☞ The Jamestown and Franklin road will be completed to Franklin, Pa., in April.

☞ The Baltimore correspondent of the Chicago *Journal* says, that like truth,

"Railroads crushed to earth shall rise again."

### Railroad Accidents for the Week.

The Charleston (S. C.) *Courier* of the 20th, reports an accident near Hope Station, on the Greenville Railroad, 21 miles from Columbia. One of the hacks which conveyed passengers across a break in the road, was precipitated down a gully, thirteen feet, in the darkness of night, into a creek. Four persons were killed, viz.: Mrs. John Van Winkle, of Charleston, Mrs. Anna Bedows, an English lady, Rev. Dr. Cohen, Professor in the Theological Seminary at Columbus, and a small colored girl, servant of Mrs. Van Winkle, and several severely injured.

A train on the Erie road was thrown from the track near Waverly by a broken rail, on the 21st. No one was seriously injured, though one of the cars was thrown across the other track, and hearing another train approaching, which they thought was coming to their relief, passengers crowded the car to watch its approach, but to their horror they found her coming at full speed on the same track The car was smashed to splinters, and the engine and four cars of this train were thrown down the embankment. The fireman jumped off in time, but the engineer remained at his post and escaped unhurt. It was a freight train, and much dairy produce was destroyed and some cattle killed.

An accident occurred on the Prairie du Chien road, near Wauwatoso, on the 20th, by the misplacing of a switch. The eastward bound train was thrown from the track just west of the bridge, and as a consequence the train went crushing into the bridge, with its momentum, entirely demolishing the structure. Car wheels, broken pieces of bridge, ties, iron, etc., were scattered about in endless confusion. No one was seriously injured by the accident.

The track of the La Crosse R. R. was torn up and a bridge burned, near Germantown, on the 28th. It is supposed to be the work of some farm mortgagers who have mortgaged their farms along the line of the road to the amount of a million dollars, which mortgages are being foreclosed. The farm mortgagers threaten to destroy the entire road if the company fail to make provision for the payment of the mortgages. A great deal of trouble is apprehended.

On the 24th, the Baltimore express on the Pa. Central R. R., was thrown from the track by the breaking of a flange of the tender wheel. The engine, express, baggage and two passenger cars were demolished. James Harris, brakeman, was killed, and several cut and bruised Three coffins containing the bodies of soldiers were broken, and the remains inseparably mangled.

An Unknown Man Killed.—On the 28th, as the Newark train was entering the Jersey City depot, an unknown man, about twenty years old, was run over and literally torn to pieces. There were three envelopes found on the deceased, upon which were inscribed, "J. Westcott."

On the 21st, a party of workmen on the Cin., Con. & Ind. Junc. R. R. were returning on a hand car, when near College Corner, the car was struck by a locomotive, and one of the workmen severely injured. The balance of the party escaped with slight bruises.

On the 23d, a freight train drawn by two engines, on the N.Y. Central R.R. was backed into during a heavy snow storm, and the engines smashed. The engineers and firemen were slightly injured.

A locomotive on the Illinois Central Railroad exploded at Mason Station, about six o'clock, on the 23d, killing three men, residents of Mason, whose names we have not been able to learn. The engineer and fireman were seriously injured.

An old man named Vosburg was last week run over on the N. Y. Central and killed. He stepped from one track to avoid a train, and was struck by another train which he did not see.

A railroad accident occurred at Jacksonville, Ill., by which the engineer and fireman were killed.

An accident occurred on the Columbus & Indiana R. R. last week, from the breaking of an axle. A brakesman was killed.

John Terrell, engaged in the machine shop at Buffalo, was run over by the cars and killed, the other day.

## PERSONAL.

Mr. James Robb, of the firm of Winslow, Lanier & Co., of this city, is about to return to New Orleans, the city of his former residence, where he will assume the Presidency of a National Bank, and will devote himself to the work of rehabilitating several of the railroads of the South-West, he having been one of the chief movers in their establishment Such was the case with the commencement of the Central Mississippi, the Memphis & Charleston, and the Southern lines. The Southern press is quite jubilant over Mr. Robb's prospective reappearance in New Orleans.—*N. Y. Tribune.*

W. K. Muir has tendered his resignation of the superintendency of the Detroit & Milwaukee road, with the view of becoming Superintendent of the Michigan Central. R. N. Rice, the present Superintendent of the latter, having accepted the Vice-Presidency of the same. William Wallace, of the Great Western of Canada, is mentioned as the successor of Mr. Muir on the D. & M. road.

Wm. H. Gedge, General Superintendent of the Kentucky Central Railroad, and one of our most enterprising and public spirited citizens, died at his residence, in this city, on the 27th, in the fiftieth year of his age. His disease was softening of the brain.

Jacob Forsyth, Esq., the popular and well known Freight Agent, formerly of the Grand Trunk and Michigan Southern Railroads, has been appointed the Chicago Freight Agent of the Atlantic & Great Western Railroad Company.

Thomas L. Knapp has been appointed Superintendent of that portion of the Toledo, Wabash & Great Western Railroad, lying between Springfield and Lafayette, Indiana; and E. H. Chapin, Superintendent of the Divisioa between Springfield and Quincy.

Clarendon Harris, engineer of the Boston & Worcester R. R. has been appointed Superintendent of the Michigan Southern R R. west of La Porte, Ind.

☞Brigadier-General Sweet, the formerly efficient commandant at Fort Douglas, has been appointed Assistant Superintendent of the Atlantic & Great Western Railway, and will establish his headquartres at Meadville, Penn.

## MONETARY AND COMMERCIAL,

Exchange is somewhat higher and the demand for money is again turning the tide of currency from East to West. Gold is rising, have advanced from 147 to 148, during the week.

The Secretary of the Treasury still adheres to his policy of funding, though it is difficult to see the advantages arising from changing a free currency to an interest bearing debt.

There is no more currency in circulation, after all, than is necessary, when we consider the amount going South daily for cotton, and in the general way of trade. Assuming our population at only 30,000,000, and the currency in circulation Oct. 31, $428,160,239, the unit of distribution would be about $15, which is certainly not too much, in view of the rapid increase of emigration to our shores, and the consequent demand for circulating medium in the future.

The quotations are:

| | Buying. | Selling. |
|---|---|---|
| New York | 5⁄@75c prem. | 1-10 prem. |
| Philadelphia | 50@.5c prem. | 1-10 prem. |
| Boston | 5⁄@75c prem. | 1-10 prem |
| Gold | 148 | 148¾@149 |
| Silver | 140@141 | 142@143 |

The New York stock market was a trifle better to-day for Government, but lower on the railroad list. Quotations compare as follows:

| | Tues A. M. | Wed. P. M |
|---|---|---|
| U. S. 6 per cent. Bonds, 1881 | 105⅝ | 10[illegible] |
| " 5-20 " old | 100⅞ | 101 |
| " 5-20 " 1864 | 99⅛ | 99 |
| " 5-20 " 1865 | 90 | 90⅛ |
| " 10-40 " | 90⅜ | 90¼ |
| " One-year Certificates | 97⅜ | 97⅛ |
| 7-30s, 1st series | 96⅞ | 97 |
| 7-30s, 2d series | 95⅞ | 96[illegible] |
| 7-30s, 3d series | 95⅛ | 96⅛ |
| New York Central | 9[illegible] | 96⅜ |
| Erie | 92 | 91⅛ |
| Hudson River | 1 8⅞ | 108⅝ |
| Reading | 11[illegible] | 11 ⅜ |
| Michigan Central | 115¼ | 115⅜ |
| Michigan Southern | 75⅜ | 75⅝ |
| Illinois Central | 133 | 132 |
| Cleveland & Pittsburg | 91⅜ | 91⅝ |
| Chicago & Northwestern | 35⅛ | 35⅛ |
| " " pref | 65⅜ | 64⅛ |
| Cleveland & Toledo | .... | 102 |
| Rock Island | 108 | 107⅛ |
| Pitts., Ft. Wayne & Chicago | 104⅞ | 10[illegible] |
| Ohio & Mississippi Certificates | 28⅛ | 28⅛ |

### Railroad Earnings.

Second week in November—

| | 1865. | 1864. | Increase. |
|---|---|---|---|
| Chicago & Rock Island | $74 438 | $72,858 | $1,580 |
| Grand Trunk | 150,037 | 106 219 | 43,818 |
| Great Western | 81 036 | 56,195 | 24,841 |

Third week in November—

| | 1865. | 1864. | Increase. |
|---|---|---|---|
| Chicago & Northwestern | $184.927 | $180 381 | $1,546 |
| Grand Trunk | 140 439 | 119,833 | 20.606 |
| Michigan Central | 106,290 | 96 593 | 9,717 |

Statement of approximate earnings of the Marietta & Cincinnati R. R. Company for the third week in November, 1865:

| | 1865. | 1864. |
|---|---|---|
| Passengers | $8 206 80 | $8,687 74 |
| Freight | 15 330 40 | 12 319 26 |
| Mail, express and telegraph | 1,175 00 | 1,984 42 |
| Total | $24 772 20 | $22,991 42 |
| Total this month to date | 77,936 10 | 64,075 68 |
| Total for the fiscal year, commencing January 1st | $1.080,855 68 | $900,392 20 |

The earnings of the Toledo, Wabash & Western R.R. are over $78,857 for the third week in November.

## RAILROAD OFFICES AND AGENTS.

**Atlantic & Great Western Railwny.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St,

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, Gcoeral Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord, General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A B. Waters, Freight and Ticket Agent, Cor. Third and Walnut.

**Ohio & Mississippi.**

W. E. Bruce, Freight and Ticket Agent, Gagette Building, 82 Wes. Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg, Contracting Agent, Vine St. under Burnett House.
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent, " "

**Central Ohio & Pittsburg, Columbus and Cincinnat**

James E Shields, General Agent, No 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A J. Day, S. W. Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J W. Burch, General Eastern Agent, No. 2 Burne House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fonrth Street.

**Eaton & Hamilton.**

Six h St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burn House.

**New York Central.**

G. B Gibson, S. W. Passenger Agent. W. H. Page Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Ittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent, No. 5 East Front St

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covingtoa.

Best Route to St. Louis and Chicago

**MONDAY, OCT. 31.**

## Indianapolis and Cincinnati

## RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M. |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 1 0 P. M. | 5:0 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harris n..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city. ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt

---

## BENJ. H. LATROBE AND C. H. LATROBE,

## CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

**LAW BUILDINGS,**

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.

**Through to Pittsburg without Change.**

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent.
my11 Pittsburg, Pa.

---

Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati .....6:30 A. M., and 7:30 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequaled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, corner northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:30 A. M. | 10 40 P. M. |
| HAMILTON ..... | 9:57 " | 11:43 " |
| DAYTON ..... | 11:30 " | 12:55 A. M |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

**SLEEPING CARS**

Provided for all Night Trains, and Smoking Cars for Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

**CONNECTIONS ARE CERTAIN!**

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast cornor of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, } Passenger Agents.
CHAS. COOK, }

---

## CENTRAL RAILROAD

—OF—

## NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6:30 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:30 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pittsville, Harrisburg etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

---

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:15; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.90; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.) 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

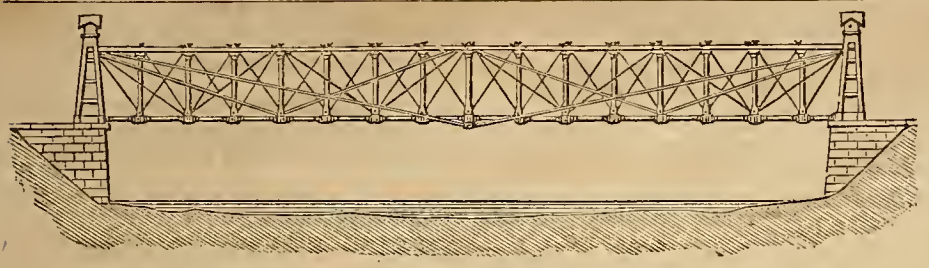
Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

---

NEW-YORK AND HARLEM RAILROAD Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Bronklyn. Baggage checked from the residence to all points on this road and its connections. 640*



(*Plan of Bridge.*)

## FINK'S PATENT

## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

## SCREW BOLTS,

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

## LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

## KNOX & SHAIN,

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

## FINDINGS,

AND

## MACHINERY,

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

**BUSH & LOBDELL,**

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

## Chilled Wheels and Tyres

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

## AMERICAN BANK NOTE COMPANY.

*Bank Note Engravers & Printers.*

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

## SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

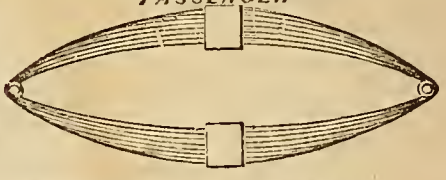
## RAILWAY SPRINGS.

**FREIGHT**





PASSENGER



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y.

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

## STOCK BROKER,

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collections.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT.

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH, *Master Transportation, Baltimore*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞ Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M. |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M. |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M. leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots, East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P M

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞ Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 89 Fourth street adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent.

W. D GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S WROUGHT IRON ARCH BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

## CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

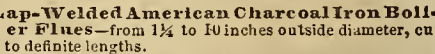
**Cast Iron Gas or Water Pipe**—½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, THOS. T. TASKER, JR., HY. G. MORRIS, CHAS. WHEELER, S. P. M. TASKER

## Philadelphia, Wilm'gton & Baltimore RAILROAD!



## FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.44 P. M (Express

On Sundays, 10.24 P. M.

☞ Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, DECEMBER 7, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

W. A. MUNSELL,
*General Agent.*


## Arrival and Departure of Trains.

| | Depart. | Arrive. |
|---|---|---|
| **LITTLE MIAMI.** | | |
| Cincinnati Express | 1:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:30 P. M. | 4:00 A. M. |
| Morrow Accommodation | 5:30 P M. | 8:00 A. M. |
| Night Express | 7:00 P. M. | 3:50 P. M |
| Night Express | 10:00 P. M. | 9:40 A. M. |
| **MARIETTA AND CINCINNATI,** | | |
| Mail | 5:00 A. M. | 7:30 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P. M. | 5:45 A. M. |
| **CINCINNATI, HAMILTON AND DAYTON.** | | |
| Indianapolis & Cambridge City | 7:00 A M. | 9:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:50 P. M. |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P M. |
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M |
| Dayton Accommodation | 6:45 P. M. | 9:35 P. M |
| Dayton, Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A. M. |
| Richmond & Chicago | 5:30 P. M. | 1:10 P. M. |
| **CHICAGO & GREAT EASTERN.** | | |
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " " | 5:30 P. M. | 1:20 P. M. |
| **INDIANAPOLIS AND CINCINNATI.** | | |
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Mail & Springfield Express | 2:00 P. M. | 4:30 P. M. |
| St. Louis and Chicago Express | 7:30 P. M. | 1:10 A. M |
| Lawrenceburg and Harrison Accommodation | 4:30 P. M. | 8:30 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:20 P. M. |
| **CINCINNATI AND INDIANAPOLIS JUNCTION R. R.** | | |
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |
| **CINCINNATI AND ZANESVILLE.** | | |
| Mail | 9:00 A. M. | 4:35 P. M. |
| Caboose Accommodation | 4:00 P. M. | 8:00 A. M. |
| **KENTUCKY CENTRAL.** | | |
| Express | 6:00 A. M. | 6:30 P. M |
| Accommodation | 1:50 P. M. | 11:00 A. M. |
| **ATLANTIC AND GREAT WESTERN RAILWAY.** | | |
| Morning Express | 9:40 A. M. | 6:30 P. M. |
| Night Express | 10:30 P. M. | 7:30 A. M. |

### The Railroads which Cincinnati ought to have.

If a citizen of Cincinnati wants to go or send freight anywhere to the east, the north, or the north-west, he has every kind of conveyance at his hands. What does this accomplish for Cincinnati? It was essentially neeessary. It could not be done without. But there is one point of view in which it has accomplished very little. The railroads east and north carry off the produce of the country, introduce merchandise and facilitate the migration of passengers. But all our railroads east and north *add no new business to Cincinnati.* They are just facilities for doing what she would do at any rate. She can get no new business in that way. The growth of the country is west and south. West we have railroads through Indianapolis, Vincennes, &c., to St. Louis and Cairo; but what have we south? The Ohio river, running nearly south-west, cuts the country into two nearly equal parts, as it regards Cincinnati; but leaves *nearly the whole* mass of railroads centering at Cincinnati, *on the north side.* On the South we have a single line of 110 miles through Lexington to Nicholasville. With that exeeption (which from its short length does comparatively little business) there is not a mile of railroad entering Cincinnati, *on the whole arc from the Marietta to the Ohio & Mississippi Railroad.*

This arc is a eomplete semi-eircle—180 degrees; and in that whole wide country there is not one continuous railroad penetratiug the entire section! A citizen of Cincinnati, who hears a railroad whistle continually sounding and who feels that he can go anywhere by rail, must, on taking up a map, be surprised to find that on *half* the whole circumference of Cincinnati there is literally no railroad! It is *from this quarter only* that Cincinnati *can get new business:* and that is what she now needs. The good people of Cincinnati seem not to be aware that the railroads north of her have been cutting off business she might have had, and she has been in a perfect Rip Van Winkle condition, sleeping on and thinking the whole world would come to her. A city, like an individual, must help, itself, if it would go forward. Herculcs will not help anybody till he puts his own shoulder to the wheel. A writer in Harper's Magazine for Deeember, in describing the resources of Virgiuia, tells some truth on this subject, which ought to be heard in Cincinnati.

The geographical position of Virginia is most remarkablc, and few realize it until they carefully examine a map of the United States. It it is nearer from St. Louis to Norfolk, Virginia, than from St. Louis to New Orleans. It is nearer, by several hundred miles, from Cincinnati to Norfolk than from Cincinnati to New York. The shortest pathway from the great basin of the West to tide-water lies directly across the State of Virginia by a route which the frosts aud snows of winter never blockade. Aeross this route lies the extension of the Paeifie Railroad, in a straight line, to the Atlantic. The vital importance of this route of exit for the West is becoming more and more manifest every day. The lake cities, Chicago at their head, are taking away the trade of Cincinnati, Louisville and St. Louis by reason of their lying on the [illegible] water-line of transportation, leading through the great lakes and over the New York and Erie Canal. These central cities must and will open a short route for themselves to the Atlantic, and that route lies directly across the territory of Virginia. Its advantage of distance will give it a great preference over the circuitous route of the lakes of the New York and Erie Canal. The valley of the Ohio and the States of Missouri, Kansas, aud all the great central belt of country running back to tha Rocky Mountains will soon be at the door of Congress demanding appropriations for opening this short cut through Virginia, by eanal and rail, to the Atlantic. This grand desideratum is already is far on the road toward completion by means of the Virginia Central Railroad, the Covington & Ohio Railroad, and the James River and Kanawha Canal.

This is the truth told very plainly; but *will* Cincinnati note that truth, and act on it? So long, has Cincinnati slept over its greatest interests, that we can scarcely hope for anything in that direction. But let us at least examine the ease, in an intelligent view. What are the distances from Cincinnati to Southern Ports? And how can railroads be made to those points? We have written out these facts long ago; but, let us begin again, and see if persisteney won't accomplish something. Let the reader take a map of the United States and he will will find the distance from Cincinnati to various points on *straight lines* are as follows:

| | | |
|---|---|---|
| Cincinnati to New York | 540 | miles. |
| " Philadelphia | 470 | " |
| " Baltimore | 395 | " |
| " Norfolk | 430 | " |
| " Charleston | 470 | " |
| " Pensacola | 590 | " |
| " Mobile | 610 | " |
| " New Orleans | 670 | " |
| " Galveston | 850 | " |
| " Brownsville, (Texas.) | 1200 | " |
| " Sante Fe | 1200 | " |

No doubt, the reader is surprised to find some of these places so near; but, this is the rihgt way of estimating distances in order to determine what may *ultimately* be done. Railroads are not made on straight lines, but they are gradually approximating straight lines, and by that, their *relatives* must eventually be determined.

We observe that the order of distances, beginning with the nearest, is as follows, viz: Baltimore, Norfolk, Charleston, Philadelphia, New York, Pensacola, Mobile and New Orleans. When we come to curve lines, the nearest to these distances, the relative loss will be nearly equal, and the same *ratios* will still be maintained.

Now, taking Norfolk as a point to be reached from Cincinnati, how can it be made available by rail? A straight line from Cincinnati to Norfolk passes very nearly through the mouth of the Guyandotte, Lewisburg, (Greenboro county), and Lexington, (Rockbridge county). How near to this line do any of the railroads of Virginia pass? The South Side road from Norfolk to Petersburg is 80 miles; to Richmond 20 miles; from Richmond (via Central) to Covington is 205 miles; now by the branches and valley of the Kanawha to the mouth of

the Guyandotte River, or the Ohio, is 150 miles. Thus from Norfolk to the Guyandotte, is 455 miles, of which only 150 remain to be made, but more than 130 through Ohio, is necessary to finish the road through Central Virginia to Cincinnati, making the whole distance—say 600 miles. This is less, by considerable, than any railroad line to New York, and terminates in one of the best ocean harbors of the world. Less than 200 miles of new road will finish the whole line. This is less distance than is necessary to be made in order to complete the line to Charleston, (S. C.); and Cincinnati ought to have both routes; but, if she will go to work in earnest, and complete one, she will soon have both; nay, will have the Mobile and Pensacola routes too, for one will no sooner be made than the others will be required and competition will soon finish them. It will be seen, by the above table, that Baltimore is the *nearest* sea port to Cincinnati, and that single fact will hereafter produce a great effect on its commerce. During the war, and with the incompleteness and defects of the Marietta Road, no proper idea could be formed of the business which the Baltimore road was destined to do. In all probability it will be found in the end, that the gross receipts of the line from Baltimore to Cincinnati are greater than any other line in America. It is yet too soon to estimate them correctly, but, while the terminus is the nearest sea port, there is also no competition on the south side. These reasons will no doubt weigh heavily in increasing its business. What Cincinnati is, or ought to be, will never be known till she has the railroads on the south side made to Charleston, Norfolk and Mobile. When this is done she will commence a new career, and run a parallel course with St. Louis. Both these cities will in another half century far outrun Chicago, which has had a temporary superiority, in the great numbers of railroads, which she has to every point of the compass.

### Detroit, Mackinaw & Superior Railroads.

The citizens of Detroit are manifesting much interest in securing a connection with the Northern Pacific Railroad, via Saginaw, and opening up the immense lumber regions of the Peninsula. A meeting on the 27th was largely attended, of which C. H. Buhl, Esq., was chairman, and W. A. Butler, Esq., Sec'y.

Geo. S. Frost, Esq., stated the progress of the Grand Rapids & Indiana R. R. northward from Grand Rapids. That the Amboy, Lansing & Traverse Bay R. R. is finished from Lansing to Owosso. The Flint & Pere Marquette R. R. have 33 miles built from Flint to East Saginaw, and by the completion of the Flint & Holly R.R. a through connection from Detroit to Saginaw.

Two projects were presented. The first proposes to alter the Western terminus of the Flint & Pere Marquette road from the Pere Marquette River to some point in the Grand Traverse region. The second is to renew the grant of the Amboy, Lansing & Traverse Bay road which expires next June, the extension of the line from Little Traverse to Fort Mackinac and obtain a grant for a railroad from the Straits of Mackinac to Marquette, and thence, via Ontonagon to Superior City.

Mr. Frost offered the following resolution:

*Resolved*, That a committee of five be appointed whose duty it shall be to confer with parties who may have influence in such matters, and see that the subject of the Land Grant Railroads, and particularly the roads which form connected lines from Detroit into Northern Michigan, be properly presented to Congress at its approaching session, for the purpose of obtaining such additional grants of land as may be necessary to promote the completion of some direct route toward the Lake Superior region.

Dr. Duffield offered the following:

*Resolved*, That, if possible, the action of Congress be obtained for a grant of lands for the construction of the Amboy, Lansing & Traverse Bay Railroad, from Little Traverse to Fort Mackinaw, and thence to Marquette or some point connecting with the road already constructed on the Upper Peninsula.

The resolutions were adopted and a committee appointed as follows: Messrs. John Burt, Wm. A. Howard, H. P. Bridge, G. S. Frost and Charles Ducharme.

The disposition of the meeting was to compromise by consolidating both grants and lines from Saginaw northwest to some point in the center of the State, and branching thence, one line to run to Grand Traverse, and the other to Mackinac Straits.

With these routes in operation the rail communication would be nearly vertical between the Straits of Mackinac and Appalachee Bay, with Cincinnati as the central point. The present route of Flint & Pere Marquette road is one of doubtful success, and the proposed change will be a beneficial one.

### The Baltimore & Liverpool Steamship Line.

The pioneer steamship of this line, the *Somerset*, which sailed on Sept. 30, from Baltimore, has returned. Her trip has been most satisfactory, and will inaugurate a new and profitable trade for the city of Baltimore, and furnish an additional and direct outlet for the exports and imports of the West.

To the Baltimore & Ohio Railroad Company may be ascribed the initiation of this important enterprise, and the wonderful energy which has surmounted all the reverses that road has sustained during the war, has found time and means to add this European link. Their cars are loaded and unloaded at the vessel's side, and the entire transit from Liverpool to Cincinnati is made in *sixteen days*.

The *Somerset* is the first of four precisely similar vessels built for this line, and has the honor of being the first American merchant steamer which has crossed to Europe since the close of the war.

We notice that one of our largest hardware firms, Messrs. Tyler Davidson & Co., is heavily represented in the manifest.

### Cotton in Mexico.

The following information respecting the cotton trade of Mexico is given in a recent report of the Secretary of the British Legation in that country. Cotton is grown in considerable quantities on both the Atlantic and Pacific coasts of the Mexican Empire, and also in the northern States of the interior, Durango and Coahuila; the cotton produced in the districts bordering on the river Nazas, in the first mentioned State, generally selling at a rather higher price than that produced in Texas, which is of inferior quality. But little of the cotton grown on the west coast of the country is brought to the City of Mexico itself, or its neighborhood; that produced in Guerrero and Michoacan being chiefly consumed in a factory established at Colima, a town which contains a number of German commercial houses, and which, from its convenient proximity to the port of Manzanillo, on the Pacific, has become a place of considerable trade, while the cotton produced in the province of Jalisco forms part of the supply required for the mills at Guadalajara and Tepee.

From the northern provinces of Durango and Coahuila considerable quantities of cotton are brought for sale to the City of Mexico, but the great bulk is conveyed thither overland from Texas. On the east coast of the Empire, the cultivation of cotton is almost entirely confined to Vera Cruz, where its production has of late been increasing rapidly, owing to the inducement which has existed to ship it to New York and Liverpool. In ordinary times, nearly the whole of the cotton produced in the State of Vera Cruz was sent up to Puebla and Mexico for the supply of the mills in those districts, but during the war in the United States nearly the whole of it has been exported.

A great deal of consternation was caused among the cotton manufacturers of Mexico by two Imperial decrees of the 8th of May last, by which an *ad valorem* duty of six per cent. was imposed on every description of woven stuff manufactured in Mexico from cotton, flax and wool. The cotton mills in Mexico consume per annum, as nearly as can be ascertained, about 142,000,000 pounds of cotton and wool.

The present annual value of the cotton manufactures of the country, amount to between $10,000,000 and $12,000,000, an approximate calculation amounting to $10,368,000, which would give $662,086 as the amount of the tax to be levied; but it is probable that it will not exceed $500,000, as a considerable portion of the goods which are legally subject to it will reach the consumer without paying any duty at all, on account of smuggling and false returns. The imposition of the tax in question will naturally have a direct tendency greatly to increase the importation of cotton goods into the ports of the Empire, both directly by the increase in the sale of the same descriptions of them as are manufactured in the country, and indirectly by increasing the sale of the finer descriptions of printed and bleached Manchester goods, a result to be anticipated from the increase in the price of the commoner sorts.

Cincinnati & Knoxville R. R.—General J. T. Wilder, of Nashville, has contracted with A. P. McDonald, A. A. Wright, and Col. R. E. Cross, representatives of English and Canadian capitalists for developing the oil and mineral resources of his company. This it is supposed, will further the interests of the projected Knoxville & Cincinnati Railroad.

### The Proposed Navy Yard at Cincinnati.

The Naval Commission appointed under a resolution of Congress approved June 30 1864, visited Cincinnati last December. From this report, which embraces some thirteen or fourteen sites examined, we make the following extracts:

"A large proportion of the officers and men," say the commission, 'who have fought the battles of the war in the Mississippi flotilla, are Western men,' and after much that is interesting as regards the peculiar position of the West in reference to its adaptability for forming a navy, they say: 'The navy in the West is to form a permanent and integral part of the Navy of the United States. It will be kept in such condition as to be ready for service at short notice. It will be employed in cruising particularly in the Gulf and Carribean Seas, and will habitually be looked to as much as any other part of the navy for active co-operation in the protection of our common country against a foreign enemy. To enable the West to fulfill the expectations thus formed of it, it will be indispensable to give it more than one yard of construction, and the Commission strongly recommends that Congress establish a yard at Cincinnati, and that for this purpose the offer of the city authorities of a portion of the projected basin in Millcreek Valley be accepted, provided sufficient accommodation can be obtained on reasonable terms."

The improvement of this ground, which would require too much grading and filling for city extension, has been agitated for several years. The creek would afford valuable water power, if properly economised, and would add materially to the manufacturing facilities of the city.

The *Enquirer* treating it as a local improvement, without reference to the proposed navy yard, says:

"On Friday last the reports of Chief Engineer Gilbert and his assistant, Mr. Dair, were presented to the Council, and the board appointed a committee to obtain a release of the grounds in Millcreek bottom for the purpose of constructing dry docks and basins. The plan upon which this improvement is based, is very full, and in detail gives the approximate cost. According to the report the principal basin receives the creek, and is located at the base of the hill on the western side of the valley. The other basin is located immediately north of the line of Liberty street, and parallel to and distant from Western avenue 1,100 feet, and is to be connected with dry docks and other conveniences for ship-building. The principal basin commences at the west side of the low ground on the west side of Millcreek, a few feet north of the line of Eighth street extended, and terminates in the creek about 2,000 feet north of the north-west corner of the city boundary, at the place where the creek makes its nearest approach to the toll-house on the Spring Grove avenue. It occupies the lowest and least valuable grounds of the valley, taking most of the present bed of the creek. The length of this basin is 10,756 feet, equal to 20.37 miles. Its width at water surface is five hundred feet, with an enlargement between Gest and Liberty streets. Its least depth will be thirteen feet, and the hight of banks seven feet above water. The area of water surface is 174.93 acres, and its hight above extreme low water of the river at the mouth of Millcreek is forty feet. The line of rocks leading from the basin to the river passes through Price street, and enters the river below the saw-mill of Cameron, Storey & Malone, at a place where the position, currents of the river, and depth of water are all very favorable, and much better than can be obtained at any other place. The locks as located are in a flight of five in number, each one having a lift of eight feet, and a depth of twelve feet of water for the passage of boats. The chambers of the locks are three hundred and sixty-six feet in length by eighty feet wide, and will pass boats of about three hundred and fifty feet in length.

For the purpose of passing off the surplus water from the basin, a weir is designed at its lower end, and a channel leading to the creek near the Cincinnati, Hamilton & Dayton Railroad bridge. This weir and channel will necessarily be expensive. The vast amount of water discharged by the creek during some of its freshets will require a weir of three hundred feet in length to prevent the water in the basin from rising more than five feet above its ordinary hight, which is believed to be the extent that convenience or prudence would permit it to rise.

The basin for the dry docks is located 1,326 feet in length by three hundred and fifty feet in width, but may be diminished or enlarged to any extent required for the purpose of ship-building. The depth of water will be thirteen feet, and its surface sixteen feet higher than that of the principal basin. This hight will place the dry-dock out of danger from the floods of the Ohio River.

The two basins are to be connected by a canal with two locks of the same lift and size of the locks leading to the river.

For the purpose of passing roads over the basin and canal, draw-bridges will be required. The kind of bridge proposed, and is believed to answer the purpose best, is the pivot bridge. Estimates are made for five of these bridges: one for the Harrison Road: one for Gest street; one for Eighth, Sixth, and other streets, and two for railroads. The Ohio & Mississippi and the Indianapolis & Cincinnati Railroads being contiguous can each have a track on the same bridge. The Cincinnati, Hamilton & Dayton Railroad having double tracks can have a bridge with two tracks. It is arranged to place these bridges over the ends of the locks, so that there will be no necessity for their standing open, at any time, longer than is required for the passage of a boat from one lock to the other, after the locks have been filled. The bridge for the railroads over locks Nos. 1 and 2 will be forty-one feet above water when the locks are full, and that for the Cincinnati, Hamilton & Dayton Railroad, over locks Nos. 2 and 3, will be thirty-seven feet above. Most steamboats with chimneys to lower could pass under the bridges, so that, except in time of high water in the river, they would seldom require moving. A bridge for Eighth and Sixth streets, to accommodate the travel on the "river road" should be placed over the ends of locks No 3 and 4. This bridge, placed on a level with that of the Cincinnati, Hamilton & Dayton Railroad, would be twenty-nine feet above water.

The estimates made are for good, substantial and durable works. The locks, weir and bridges, except draws, of stone and masonry, and the lock gates and draws to the bridges, of timber. The only protection estimated for the banks is a strip of stone pavement two yards wide of the water line, which it is believed, will be sufficient for the purpose.

The following are the estimates as recapitulated in the report;

| | |
|---|---|
| Principal basin | $529,937 |
| Outlet from principal basin to the river | 951,097 |
| Weir and channel to the creek | 98,670 |
| Canal and locks between the basins | 312,634 |
| Basin for dry docks, pikes and culverts | 53,881 |
| Total cost of improvements | 1,946,819 |

A canal is designed and contemplated to connect the Miami Canal with the principal basin. The length of the connecting canal is to be 2,475 feet, the whole descent 71.25 feet, the number of locks 5, with each a lift of 14.25 feet. This canal passes under the Colerain pike, Cook street and the Spring Grove avenue, so low as to require no elevation of these streets. It is straight and crosses the street at right angles, and the west side of the Colerain road at the north corporation line of the city. The cost of constructing the canal will be $184,616. It is believed that the proprietors of the canal willl build this canal connection at their own expense. The canal, from where it is tapped down to the head of Plum street, and thence east to Broadway, will be converted into wide and handsome avenues. The Council Committee will report their action at the next meeting of the Board.

### Reno Times.

We are in receipt of the first number of an excellent weekly paper of the above title, under the editorial charge of S. D. Page, Esq., and devoted to the interests of the new town whose name it bears. Reno will soon be in railway communication with the world, and an "oil center" of the first magnitude. We welcome its exponent.

### Experiments on the St. John Boiler.

Mr. Norman Wiard, of New York has just concluded some very interesting experiments on board of the steamboat St. John, of the People's Line of steamers. By permission and the request of the owners of the line, he inserted a number of thermometers in the port boiler (the one which exploded) for the purpose of ascertaining the different temperatures in the interior of the same.

The following shows the temperature at stated points:

| | | |
|---|---|---|
| Below the water line | 276 | degrees. |
| In the steam from | 395 to 500 | " |
| Twelve inches above the rupture of the 29th October | 500 | " |
| Twelve inches below the rupture of the 29th October | 269 | " |

The surface of the water in the boilers oscillated up and down six inches alternately, heating the plate by exposure to the hot steam at 500 degrees, and cooling it by contact with the water at 269 degrees. It is fearful to contemplate, when we now know that a sudden change of 231 degrees is constantly occurring in these boilers; and the certain effect must be, with such expansion and contraction, to permanently weaken the plates of the boiler. These experiments have already created a great sensation among boiler-makers and engineers.

A correspondent of the New York Commercial Advertiser is out on the huge frauds that attend most of the railway consolidations of the country. He cites many examples of gross depreciation under a tremendous system of "bearing" to effect great speculations. Even now, he says that the remark is frequently made of the New York Central that the "strainings" are much more desirable than the dividends.

### The Chicago & Northwestern Railway.

From the recent report of this company, we condense the following items:

The corporation is formed by the consolidation (June 2, 1864) of the Chicago & North western, and the Chicago & Galena Union Railroads, and their auxiliaries, thus transforming competing roads into a powerful and useful combination, working in all 860 miles of track.

At the time of its consolidation with the Chicago & North-Western Railroad Company, the Galena Company comprised the following lines and lengths of road, to-wit:

| | MILES. |
|---|---|
| 1st. The original "Galena & Chicago" line, extending from Chicago, *via* Junction, Elgin, Belvidere, and Rockford, to Freeport | 121 |
| 2d. The Dixon Air-Line, extending from the Junction, thirty miles west of Chicago, due west through Geneva to Dixon, and to Fulton on the Mississippi river; and to the east end of the bridge over the Mississippi, near two miles below Fulton | 108 |
| 3d. The Beloit Branch, from Belvidere to Beloit, about | 21 |
| 4th. The St. Charles Air-Line, extending, at the time of consolidation, from the South Branch of the Chicago river, in Chicago, to Harlem, about | 9 |
| 5th. The Elgin & State Line Railroad, extending from Elgin north to Richmond, near the State Line of Wisconsin, about | 33 |
| Add the Branch or arm from the old main line to Elgin, over | 2 |
| Making in all | 294 |

The double track from Chicago to the Junction (30 miles) is only counted as 30 miles in the above statement, the second track not being taken into account.

| | |
|---|---|
| In addition to the above 294 miles of road owned by the Galena & Chicago Union Railroad Company previous to its consolidation with this Company, that Company was, as has been hereinbefore stated the perpetual lessee of the Chicago, Iowa, and Nebraska Railroad about | 82 |
| Also of the Cedar Rapids & Missouri River Railroad, of which there is now in operation | 122 |
| And said Galena Company was also perpetual lessee of the Beloit and Madison Railroad | 47 |
| Making a total of leased roads operated by the said Galena Company equal to | 251 |

Less, however, about 24 miles from Nevada to Boonsboro, which has been constructed and put in operation since the consolidation of June 2d, 1864.

| | |
|---|---|
| Total number of miles of road owned by the Galena Company at the time of consolidation | 294 |
| Total number of miles of leased roads operated by the Galena Company at the time of the consolidation | 227 |
| Add to this the extension of 24 miles of leased road from Nevada to Boonsboro, since consolidation | 24 |
| | 545 |

Making a total of 545 miles of road contributed by the Galena & Chicago Union Railroad Company, as owner and lessee, to the Chicago & North-Western Railway Company, without counting the second track, of 30 miles, from Chicago to the Junction.

At the time of consolidation with the Galena on the 2d of June, 1864, the Chicago & North-Western Railway comprised the following lines and length of road, to-wit:

| | MILES. |
|---|---|
| Its main line, or "Wisconsin Division," as now called, extending from Chicago, via Janesville, Fond du Lac, Oshkosh, and Appleton, to Green Bay | 242 |
| Its "Kenosha Division," extending from the town of Kenosha, on Lake Michigan, to its junction at Rockford on the Rock River, with the old Galena Road | 73 |
| Total length of railroad line owned by Chicago & North-Western Railway at the time of consolidation with the Galena, as aforesaid | 315 |
| To which add the lines of road owned by the Galena at the time of consolidation | 294 |
| Length of Galena leased lines of road at the time of consolidation | 227 |
| Galena extensions of leased roads since consolidation | 24 |
| Total length of roads owned and leased at the time of consolidation | 860 |

In October, 1864, the Peninsula Railroad was added, consisting of 70 miles, making a total of 930 miles operated by these consolidated interests.

The various lines are in excellent condition, and the largely increased earnings are the legitimate fruit of the sound policy of its managers in effecting this combination.

The officers are: Hon. Wm. B. Ogden, President; Perry H. Smith, Vice-President; James R. Young, Secretary; Geo. P. Lee, Treasurer; Joseph B. Redfield, Ass't Sec'y; Geo. L. Dunlap, Superintendent.

We shall endeavor to speak more fully of this road as opportunity offers.

### Annual Meeting---Baltimore & Ohio Road

The annual meeting of the stockholders of the Baltimore & Ohio Railroad was held in Baltimore last Monday. The reports of 1864 and 1865 were not ready in consequence of the unadjusted condition of the accounts; but John W. Garrett, Esq., President of the Company, presented the report for 1863. That year was the most destructive to the road and its interests. The war laid a heavy hand upon it. Twenty-four bridges were blown up, some of them several times, and more than forty-five miles of track were destroyed by rebel raiders.

The gross earnings of the Main Stem for 1863 were $6,509,945 06, exceeding those of 1862 by $2,028,086 08, and those of the fiscal year 1861, $3,598,519 36. The working expenses for 1863 were $1,967,847 41, being an increase of $538,641 58 over 1862, and $574,752 50 over 1861, making the increase of net profits in 1863 $1,489,444 50 over 1862, and the increase of net profits in 1863 $2,723,766 86 over the year 1861. The sinking fund was increased during the year to $859,965 24, being an increase of $47,300 52. The investments for the redemption of the mortgage debts increased $211,551 21. The additional advances made for interest and improving the Northwestern Virginia road, after crediting all its earnings, were $209,010 71.

The report refers to the agreement made with the Central Ohio Railroad Co., by which, in consideration of the investment by this company of $1,223,932 83 in the first mortgage bonds of the Central Ohio Road, all the passengers and freight of the latter road are directed exclusively over the Baltimore & Ohio Road.

The mortgage bonds of the company held in the sinking fund, to the amount of $369,249 54, have been cancelled and deducted from the mortgage loans. The balance of cash in the treasury September 30, 1863, after deducting $161,146 25 for payment of interest on the city loan, and the company's bonds, was $233,338 71.

On the Washington branch the earnings for the fiscal year 1863 were $703,123 59, being a decrease of $75,293 08 compared with 1862, and an increase of $264,983 90 compared with 1861. The partial expenditures charged amounted to $273,233 32, which, deducted from the revenue stated, produced a net sum of $429,890 27, showing a decreased gain compared with 1862 of $194,698 65 and an increased gain compared with 1861 of $108,165 92. Large expenditures were made for the reconstruction of the track between Laurel and Washington, and replacing the forty pound rail with a sixty pound T rail.

On the Northwestern Virginia road the earnings for the fiscal year 1863 were $446,220 86, and the working expenses were $404,095 07. During the invasions by the Confederate forces there were nine bridges damaged and destroyed. The burning of the timbering in No. 18 tunnel detached a mass of rock 450 feet in length and from 10 to 16 feet in depth. A force of ninety men, working half each night and day, was employed for fifteen days and nights in clearing the tunnel preparatory to retimbering. At the commencement of the work owing to the gases, the men had to be changed every half hour. Until the tunnels upon this road are permanently arched, the embankments widened, &c., extraordinary expenditures in working the road must continue. The earnings were greater than the previous year by $82,198 67, and the increased expenses, 137,424 30.

The aggregate earnings, working expenses and net earnings of the Main Stem, Washington Branch, and the Northwestern Virginia Railroad for the fiscal year 1863 were as follows:

| | |
|---|---|
| Total earnings | $7,659,289 51 |
| Total expenses | 2,643,175 80 |
| Total net earnings | $5,016,113 71 |

The State tax on passengers on the Washington Branch for 1863, paid into the State Treasury, was $207,540 51.

After the reading of the report, no other business being presented, the stockholder meeting adjourned for the election of directors to serve for the ensuing twelve months.

Messrs. John P. Kennedy, Miles White and Wm. J. Albert acting as judges, and on counting the ballot the following gentlemen were found to be unanimously re-elected by a vote of 34,050 shares, viz: John Hopkins, Samuel W. Smith, Francis Burns, W. A. Hack, John Spear Nicholas, John Gregg, C Oliver O'Donnell, James Harvey, Wm. Heald, Galloway Cheston, Wm. W. Taylor, Samuel Kirby.

### Election for President of the Virginia Central Railroad.

Colonel Fontaine, for many years President of the Virginia Central Railroad, was defeated for that position, on Friday, by General Wickham. The Richmond Examiner says:

"The defeat of Colonel Fontaine for the Presidency of the Virginia Central Railroad is an illustrative instance of the inconsistency of Governor Pierpont. When the Danville Railroad was about organizing he appointed the State proxy so as to defeat the election of General Johnson; he even went further, and authorized the statement to be made that it would, in his opinion, be highly improper for the Danville Road to elect General Johnson to its Presidency. Through his active instrumentality, and the influence of his position the defeat of General Johnson was accomplished. But when the Central Railroad is about to elect a President, the instrumentality and influence of the Governor are exerted in behalf of a confederate officer, and all his apprehensions disappear when a partisan is to be rewarded. In both instances he was consistent in one respect: he successfully defeated the wishes of the stockholders. General Johnston had four fifths of the stockholders' vote, and was defeated by the Governor's appointees. Colonel Fontaine had about the same amount of the stockholders' vote, and he, too, is defeated."

### Railroads in Iowa.

From the Burlington Hawk Eye, 10th.

In a large number of the counties in this state, there is a general revival of interest on the subject of railroads. Old roads are being extended and new ones projected with a great deal of energy. The railway system of a state exerts a powerful interest on its growth and prosperity, and its extension and success are of first importance to the material progress of its people:

According to the last census, the number of miles of railway, with their annual gross earnings in this State, were as follows:

| Names | No. miles com. | Gross Earn'g |
|---|---|---|
| K. Mt. P. & M. | 25 | $ 66,103 91 |
| Des M. V. | 24 | 318,395 88 |
| McG. Western | 40 | 51,834 00 |
| M. & Missouri | 166½ | 693,219 32 |
| D. & Sioux City | 166 | 398,228 44 |
| D. & Southwestern | 57¾ | 63,630 56 |
| C I. & Nebraska | 82¾ | 425,960 80 |
| C. R. & M River | 123 | 236,189 92 |
| B & M. River | 75 | 390,137 09 |
| Ft. M. & Keokuk | 7 | in K., M, P. & M. |

The Chicago, Iowa & Nebraska, and the Missouri river roads connect at Cedar Rapids, making a continuous line of road from Clinton on the Mississippi to Booneville on the Des Moines, a distance of 205 miles. The total earnings of the above roads amount to $2,553,709 91, which yields a tax of 25,537 09. The State Treasurer (as we learn from Dr. Wright, Secretary of State, from whom we get the above figures,) is of opinion that 1865 will add fifty per cent, to the earnings of the above roads. Since the above "number of miles completed," was given, a number of the roads, such as the Dubuque & Sioux City, Des Moines Valley, and probably one or two others, have extended their lines several miles. Nearly all are making arrangements to push forward rapidly in the spring. The Burlington & Missouri is already at work bridging the Des Moines near Ottumwa. and has a large force at work between that point and Albia. The contracts we believe, are let as far west as Chariton, and the work will be pushed rapidly foward. The Des Moines Valley has its track nearly completed to Monroe the route located and the work let nearly if not all the way to Des Moines, where it promises to have its cars running during the season of 1866. The Mississippi & Missouri is completed seven miles west of Grinnell. It is reported that this road, including the Muscatine and Oskaloosa branch, has changed hands and that the Chicago & Rock Island Company, its present owners, would push forward the work of construction with their well known energy. The Dubuque & Sioux City road is open to Ackley, which is 12 miles from Iowa Falls in Ardin county. The indications are that all the great lines which have different points on the Missouri river as their ultimate termini, will be pushed forward vigorously during the next twelve months.

Through the central and eastern counties, there is now an unusual interest in the North and South lines proposed, and the projects are very numerous. The Pella, Newton & Marshalltown road, B. F. Roberts, President, of which a preliminary survey has been made. The Iowa Central, David Morgan President, extending from the southern line of the state by way of Centreville, Albia, Eddyville, Oskaloosa, Montezuma, Toledo and Cedar Falls to the northern line of the State—designed to connect on the south with the North Missouri road, and on the north with the St. Paul & Southern Minnesota—a large portion of the route has been surveyed, and the contracts let for grading several sections immediately south of Cedar Falls. The St. Louis & Cedar Rapids road, Mr. Angle, President, running from the southern line of the State, to Cedar Rapids by way of Bloomfield, Ottumwa and Sigourney, with efforts being made to deflect it to Iowa City, and one or two other important points; this being also intended to connect with the North Missouri at the State line. There is another proposed route from Keokuk to Dubuque via Mount Pleasant, Columbus City, Muscatine, Tipton and Anamosa. There is also a road projected, and we believe that it is now sharing the general revival, running east and west through the Southern tier of counties, by way of Keosauqua, Bloomfield, Centreville, etc. And also on the Missouri slope, an important line from Council Bluffs to St. Jo., Mo.

From this brief outline of railroads, built, building and proposed, it will be seen that Iowa is in a fair way to be soon well suplied with the means of communication with the outer world. We may have inadvertently omitted some important proposed lines, and made some mistakes with others; if so we will cheerfully make corrections, or publish additional facts if furnished by those interested. We are gratified to see the interest manifested on this subject It speaks well for the inteligence and energy of our people, and cannot fail to have a decided influence on the development of the great natural resources of our richly endowed state.

### The Railroad Interest.

The organ especially devoted to the railroad interest in the United States, though not being disposed to complain, is inclined to believe that the tax-gatherer is too ubiquitous a person altogether.

"Look," says our cotemporary, "at the manner in which high taxes and high prices everywhere bear down upon this great interest, the carrying, one of the five great industrial interests of the country. The rails used in laying the superstructure cost double their former price. If imported, a tariff duty is levied nearly twice as high as formerly; added to which is the difference between specie and currency, in reckoning the rate of exchange. If made at home, they are taxed, first, as pig, next, as bar iron, to say nothing of miners' and manufacturers' licenses. The assessor levies upon the material used in making locomotives, as pig iron, as bar iron, as wheels, axles, boilers, rivets, tubes, smoke stacks, lamps, and finally, a duty of six per cent. upon the finished machine. It has been estimated that at one time the taxes paid upon a single first class locomotive amounted to $5,000, or fully 20 per cent. of the whole cost. But as if those visitations were too light or unfrequent, the law imposes a further tax of 2½ per cent. on gross receipts, and a further tax of five per cent. upon all dividends; while individuals have still to pay a heavy income tax upon what remains. Even the repairing of engines is made to contribute no inconsiderable sum."—*Stockholder.*

Bay de Noc State Road.—The work on this road, under the superintendence of James Young, Esq., the energetic foreman, is progressing rapidly. The road is opened to the hard-wood ridges, five miles this side of Brooks' Bay Shore House, and in a few days more will be opened quite through to this village.

The railroad company have a party of men, under the superintendence of F. Armstrong, opening it through Delta county, so that we shall be sure of having a good winter road to Escanaba by the time snow falls.—*Menominee Herald.*

### The Manufacturing and Mining Interests.

Banquet at Bethlehem—Endowment of a College and School of Mines—Taxation, Protection, and Education.

The Permanent Committee on Internal Revenue of which the Hon. John Sherman is Chairman, has recently made a tour of observation through the mining regions of Pennsylvania with a view to collecting such information as will enable them to legislate intelligently on the great interest of mines and iron manufactures at the coming Session of Congress. The Committee finished its labors yesterday, having traversed the coal fields between Pittsburgh, Scranton, and Mauch Chunk, and after full and free conference with those interested in those subjects returned to Washington.

Their arrival in the Lehigh Valley was made the occasion of quite a large gathering of capitalists interested in mines, iron mills and railroads, which took the form of a complimentary dinner tendered to the Hon. Asa Packer, one of the wealthiest and most influential gentlemen in Pennsylvania. Mr. Packer has recently, with very praiseworthy liberality, contributed $500,000 to establish a College of Literature and Physical Science to be located at Bethlehem, and his freinds testified their appreciation of his example by a banquet at the Sun Inn, probably the most superb ever given in that State, W. H. Gatzmer, J. G. Fell, Lewis Audenried, John Hutchison, Jos. B. Van Dusen, David N. Thomas and John Smylie, jr., were the committee of arrangements, and Mr. Grider the caterer for the affair.

The affair passed off very harmoniously, and from the immense moneyed interest represented it cannot fail to have a beneficial influenee upon the future of the country. Among the guests were the Hon. Morton McMichael of Philadelphia, Henry C. Carey of Pennsylvania, Gov. Ramsey of Wisconsin, Simon Cameron, D. Dougherty and John Welsh of Pennsylvania, J. W. Forney of Washington, Mr. W. H. Gatzmer, J. Dorrance of the Camden & Amboy Railroad, Mr. Berdell of the Erie Road; D. M. Fox, M. Devin, Elisha Parker, James B. Van Dusen, N. S. Bentley and others of New-York. Mayor McMichael, in returning the thanks of the honored guest, alluded to the vanity of acquiring wealth merely for its own sake. The best use to which a man could put his money, after paying his debts, was to provide for the education, the morals and the comfort of those around him. This Judge Packer had done in more instances than the one they met to commemorate.

Mr. Devin of New-York in response to a toast of that State, pointed out that Philadelphians were quietly and steadily turning their attention to manufactures and mines, while New-York was most engrossed in importations and trade. He had to confess that our course tended to help other countries at our expense, and urged upon all the duty of making everything we needed for our own use.

Mr. H. C. Carey said in reply to some remarks of Gov. Ramsey, that the only importation we needed from Europe was labor. If our legislators would give us a permanent tariff that would justify the erection of the machinery, we could excel Europe, in the quality and cheapness of our goods. Between 1846 and 1862 there were hundreds of blast furnaces stopped because of the ruinous competition of foreign iron. Here we had at either end of the Lehigh Valley mines of coal, iron

and zinc, and all that was needed was protection and labor. The way to build the National prosperity surely was to educate the people who would then see to their lawmakers. This Judge Packer had commenced in a practical way. His example should be followed.

Speeches were than made by Messrs. Picard, Gatzmer, Judge Ston[illegible] W. W. Ketchum, Dougherty and McLain, when the meeting terminated in good feeling

It is astonishing that [illegible] of the richest and most populous portions [illegible] the country should be comparatively unkn[illegible]n to the reading public. The aggregate product of coal from three counties pouring th[illegible]ir great mineral wealth through Lehigh Valley was nearly 10.-000,000 of tons. Beside this enormous sum there is an inexhaustible field of iron ore, which but for the uncertainties and caprice of our legislation might be nourishing our own laborers instead of those of England. Already many new iron works are being erected in the Lehigh Valley. The largest zinc works in the country are now in operation here, and from the proximity of the best coal in the world, the day cannot be far distant when the iron manufacture of the Lehigh Valley alone will equal the present gross product. Our rolling mill at Bethlehem is now producing rails superior in quality to the English, at the same prices, with as much work as they have capacity for. Measures will be introduced into Congress this winter for putting the iron interest on a permanent national basis.—*N. Y. Tribune.*

---

Organization of Engineer Corps for Field Operations between the Atlantic & Great Western R. R. and the Catawissa R. R.—For the purpose of facilitating surveys for a location for a new line of wide gauge railroad between the Milton terminus of the Catawissa Railroad on the Susquehanna, and the Atlantic & Great Western Railroad or one of its branches, the ground has been partitioned into three divisions. For each division two corps of engineers will be forthwith organized, making six corps in the field at the same time. Engineer on the Western Division, J. Milnor Roberts; Middle Division, Capt. P. Jarrett; Eastern Division, (name unknown,) from England; Associate Engineer, Col. Jas. Worrell; Chief Engineer, Thos. W. Kennard.

Worrell, Jarrett and Roberts are names well known in Pennsylvania, associated with civil engineering as a profession and a science.

Obviously, there are lively times ahead, among rival railroad organizations; and having hitherto commented on the *geographical* part of the scheme for a wide gauge railroad across the Allegheny mountains in this State, we shall, at a future time, give some space to the consideration of its *financial* condition, bearings and prospects. We purpose also, to review the gauge laws of Pennsylvania. For, as English money is to build the new east and west line, English eyes of course gaze on it in the light of an *investment;* and hence, as an investment it ought to receive impartial criticism.—*R. R. & Mining Register.*

---

The directors of the East of Prussia Railway are now having iron boxes made, which will be fixed in front of the locomotives, and filled with sand. By turning a cock, the driver can open them as required, and the sand falling on the rails gives the necessary purchase for the wheels. This arrangement is for the present to be confined exclusively to the mail trains.

**London "Pneumatic Dispatch Railway."**

The works of the above line between Holborn and the Euston station are now completed, and the line ready for opening. To test the working of the company's tube, on Tuesday last, a small goods train was driven through from the Central station in Holborn, passing beneath Holborn, New Oxford street, Tottenham Court road, Hampstead road, and Drummond street on to the Euston station, a distance of about two miles, having some sharp curves on approaching the Northwestern station. The tube is 4ft. 6in. high, and about the same width, the rails being fixed in it for the carriage-wheels to run upon. At the Central station in Holborn two tubes are carried beneath the footway and ground floor of the building; one connecting Euston station with the Central station, and the other being intended to connect the latter with the Post-office in St. Martin's le-Grand. This tube has only been carried to Holborn hill. In the Holborn station the back portion of the building is occupied by three boilers, each of which can be worked up to a pressure of 30 lbs. per square inch. As a rule only one boiler will be worked at a time, though all three can be used if necessary. Between the boiler room and the arrival and departure platform is the engine room, fitted with two 24 horse-power engines, which work the shaft of the circular disk or fan, 22 feet in diameter. This revolving rapidly upon its axis, having inclosed air-chambers, can be used either for propelling the laden trains forward by atmospheric pressure behind them, or for drawing them back through the tube by forming a partial vacuum before them. The trucks of goods, accompanied by one of the attendants, were blown through the tube to Euston in about five minutes, showing the ease with which a portion of the goods and parcel traffic of the metropolis will shortly be conducted. Wheatstone's telegraphic apparatus is used at the stations, and is found to act well. In the station there are two main lines of rails and three sidings, the distance between the rails being 3 ft. 8½in. There are also two traversing platforms for shifting the trucks from one part of the station to another. The Duke of Buckingham, the chairman, and some of the directors of the company, were blown from the Holborn station, under the supervision of Mr. Rammell, the engineer, through the tube to Euston; the distance (two miles) being accomplished in five minutes. — *Mechanics' Magazine.*

---

The Baltimore and Ohio Railroad --There are now over 7,000 persons employed in the various departments of this road, and the amount of business being done is larger than ever before. All the double track on the main stem from the Monocacy to North Mountain, and on the western end of the road that had been destroyed during the war, is now replaced, and much more double track and sidings have been added, between Ellicott's Mills and Martinsburg. Large workshops at Martinsburg, Harper's Ferry and other points are in rapid course of construction. The average amount of coal brought to this city by the company reaches the extraordinary figures of 70,000 tons per month. The freight trains from the West number seven or eight every 24 hours, and these are filled with all the products of the West and Southwest. Quantities of freight from the West, direct for a European market, via the Baltimore and Liverpool line of steamers, are constantly arriving. On Saturday last over 400 car loads of freight arrived from the West, and several long trains left the Mt. Clare and Camden streets depots filled with dry goods, groceries, etc., for all points West. There are now about 1,200 men employed at the Mt. Clare shops, building engines and cars, and repairing old ones, and the company are also purchasing some of the excellent engines now being built by Messrs. Hayward, Bartlett & Co., who have the large shops formerly used by the Messrs. Winans, adjoining the Mt. Clare depot. The immense business being done by the Baltimore and Ohio Railroad, and the fair promises of a continued increase, speak encouragingly for the business prospects of the city.—*Baltimore Sun, Nov.* 15.

---

From the American Artisan.

**How to Prevent Railroad Accidents.**

Messrs. Editors:—I notice in a recent number of your paper that you take an interest in any invention or the adoption of any rules that will reduce the number of railway accidents, and especially the consequent loss of life. Hence I believe you will bring to notice a valuable invention, even if you are not paid by the line for the insertion.

An intelligent and accomplished engineer has invented what he calls a "Railroad Train Recorder." This machine occupies about one cubic foot, and is fastened in the cab of the locomotive; a roll of paper is put in, and the box locked. At the end of the route the superintendent, assistant superintendent, or train-master finds recorded upon the paper the following facts:—1. The speed run at any point on the road. 2. Signals given, whether by bell or whistle, and where. 3. Changing the position of the reverse handle, and where. 4. Condition of the track, low or high joints, and where. 5. It indicates to the engineer, by day or night, the speed he is running, and also records that speed. 6. Steam pressure and water line are recorded. 7. The places where the "drivers" have slipped. These points are sufficient to enable any railroad manager to test the qualities of an engineer, and decide whether he does his duty, also as to the condition of the track, and the daily progress made by track repairers.

The inventor, Mr. C. W. Theodore Kransch, of St. Louis, Mo., is unable to establish a manufactory for these "Recorders," and will give some capitalist or company interested in "progress" a liberal interest in the patent, if thereby he can insure their manufacture and introduction. Those interested, or wishing further information, should address him. I merely submit the matter, as I know of the existence of this machine, and think it is the duty and will be conducive to the profit of some company to bring it into use without delay. N. H. P.

New York, Nov. 24, 1865.

---

Fuel in Colorado.—Mr. Frank Dihben, engineer, who has just returned from Colorado, reports that lignite and coal of tolerable quality are found in the mountains, and seem to abound in most parts of the territory. Wood also is found in considerable quantities. It has been reported that between the Missouri river and Denver City there is not known to be fuel of any kind in sufficient quantities for steam transportation. From Mr. Dihben's report, we judge that a careful search might result in the discovery of coal or lignite in this region. In some parts of Louisiana buried forests have been accidentally discovered, and found good for fuel.

### Whitewater Canal Suit.

The Cincinnati Common Pleas has decided the case of Goodwin and others, vs. The Cincinnati & Whitewater Canal Co., The Cincinnati & Indiana and Cincinnati & Indianapolis Railroad Co., in favor of the defendants.

The petition was in effect to set aside an appropriation said to have been made by the Cincinnati & Indiana R. R. Co., of the Whitewater canal, from Harrison to Cincinnati, charging that the act was fraudulently done on the part of the railroad companies, and various individuals directors in these companies.

### Prairie du Chien in Court — Motion to vacate the Injunction.

Henry Stimson vs. the Milwaukee & Prairie du Chien Railway Company.

This was a motion on behalf of the Company to dissolve an injunction obtained at Special Term, restraining them from issuing their common stock. The injunction was originally obtained on the ground that this would be a violation of the rights of the owners of preferred stock, the holders of the mortgages upon the Milwaukee and Mississippi Railroad. On this motion the counsel for the railroad urged that the common stock being higher in price than the preferred stock the directors were entitled to sell that as it would be more advantageous to all parties, and that the Court had never obtained proper jurisdiction over the action, and on these and other grounds, asked that the injunction be vacated.

Mr. Roelke for the motion. Ex-Judge Allen opposed.

Frye's Traction Engine.—The company which we spoke of several months ago as being formed to run traction engines and steam-carriages between the Missouri river and Denver City, has designs for traction engines completed, and has commenced the construction of one. The following dimensions of one are taken from a pamphlet for private circulation; the one being constructed is smaller:—Boiler, 48″ diameter; 13′ 8″ long, ⅜″ plates. Flues, 193, 2¼″ diameter, 13′ 8″ long, iron. Firebox, 42½″ long, 65″ wide; water spaces, 8″. Tank 19′ 6″ inches wide. Hind wheels, 12′ 2¾″ diameter, 44″ tread, 9′ apart. Fore wheels, 7′ 8″ diameter, 36″ tread, 9′ apart. Center of boiler from ground, 8′ 8¾″. Center of superheater above boiler center, 5′ 7″. Superheater, 34⅝″ diameter, 10′ 8″ long, 52 flues, 3¼″ diameter. Cylinders, 11″ bore by 15″ stroke, two to each hind wheel; and 11″ bore by 7½″ stroke, two to each fore wheel. Grate area, 19.2 square feet. Area of fire-box surface, 117 feet. Area of tubes, 1,428 feet. Total heating surface, 1,545 feet. Weight, empty, 32 tons; loaded, 54 tons.—*American Artisan.*

### Sale of the Sandusky, Dayton & Cincinnati Railroad.

This road is advertised to be sold at auction on Friday, the 5th of January next, at the Court House in Sandusky. By order of Court, minimum price at which the road can be sold is $750,000. The sale is made to satisfy the sum of $1,367,742 due to holders of bonds and coupons issued under a mortgage of Feb. 1, 1851, of which Daniel S. Miller is sole surviving trustee, and $1,305,036 62 on bonds and coupons issued Feb. 1, 1855.

## RAILROAD ITEMS.

We learn from the Chicago Journal that the "American Central Railway Company," which was organized in 1856, to build a road from Fort Wayne, Indiana, to New Boston, Illinois, on the Mississippi River, about sixty miles below Rock Island, has recently been consolidated with the Pittsburg, Fort Wayne & Chicago Railroad. About a hundred miles of the road is now graded from New Boston eastward to this side of Lacon in Marshall county; but the work was interrupted by the financial crash of '57, but is now certain to go ahead. Under the consolidation recently effected, Hon. John S. Thompson, Judge of the Tenth Judicial District of Illinois, who is President of the original corporation, left for England a few days since, to negotiate for the purchase of the iron for the entire road, from the Mississippi to the Indiana State line. And it is anticipated that work will be vigorously resumed early next spring, and that it will be so far completed eastward from New Boston as to intersect with the Chicago, Burlington & Quincy Railroad, at Galva, some time next year. The road will also cross the Chicago, Alton & St. Louis Railroad twenty miles east of Lacon, to which point it is already graded.

The Augusta & Macon Railroad.—The Mayor of Macon has ordered a meeting of citizens "to consider upon the proper means to be taken to induce the completion of the Macon & Augusta Railroad at the earliest possible day." The Macon papers are also urging the necessity of having the unfinished part of the road laid at once. The distance is only thirty-one miles between Milledgeville and Mayfield. The road between these points is already graded, and needs only the superstructure. When this is laid, there will be almost an air line from Augusta to Montgomery, through Macon—a line shorter by thirty odd miles than the present one via Atlanta. This line will consist of the Georgia Railroad to Camak; thence by the Mason and Augusta Road to Milledgeville; thence by the Central to Macon; the Muscogee Road to Columbus, and so on. A glance at the map of Georgia will show the reader how direct this route will be, and what great advantages it will possess over the present one.

The completion of the horse railroad system of the capital which can not be long delayed, will place Mexico on an equality in such conveniencies with the most favored American cities. A contract has also been made with a French company to build a railroad to Toluca. The iron for the Chalco railroad is all on the ground. This fine road is already completed as far as St. Angeles, and the cars will be running to Chalco by the 1st of January. Nearly all the country produce for consumption in the capital will be brought over this line.

To continue the chain on from the western end of the Catawissa railroad, the Atlantic & Great Western railroad company will use the charter of the Lewisburg Center & Spruce Creek company. This latter company obtained a charter last winter to connect with any company in Northumberland county, and to make their western terminus at Bellefonte. From Bellefonte is the Snow Shoe railway to Philipsburg—from Philipsburg another route is secured to Clearfield—from Clearfield another to a point in the oil region intersecting with the Atlantic & Great Western already in operation.

A party of engineers is surveying a railway route from McConnellsville, Ohio, east through Morgan, Guernsey, Harrison and Columbiana counties, Ohio, toward New Lisbon, Ohio, there to connect with a branch of the Atlantic & Great Western R R. The route will be for some of the distance along the line of the Pittsburg & Maysville road, projected some years ago, and on which considerable work was done, through Morgan and Guernsey counties. It is said that foreign aid is to be had on condition that the people raise a certain amount.

A meeting was held "on 'change" in St. Louis, Thursday afternoon, to urge on the extension of the Pacific road to Leavenworth. The latter city and county had subscribed five hundred thousand dollars to the work, and the St. Louis merchants are asked to help. It was stated that thirty-six million pounds of freight came over the Hannibal & St. Joseph road to Leavenworth last year, yielding that road six hundred thousand dollars. The people of Leavenworth seem to prefer the Pacific route, for which they voted half a million, while they refused to help build the Cameron connection with the Hannibal & St. Joseph road.

A sleeping car just completed at the Western railroad shops, Sprinfield, Mass., is said to be unequaled. It is fifty-eight feet long and of unusual height, with a raised roof. It contains forty-two berths, in three tiers, the middle tier folds down in the day-time, and forms with the lower berth an elegant sofa. The mattresses are of hair, covered with elegant moquette cloth. The pillows are also of hair, very springy and cool, covered with tapestry, with linen cases. The curtains are of French lasting, with heavy cord and tassels, and the rods heavily silver plated.

The following are the officers and directors of the Minnesota Valley railroad company: President, E F. Drake; Vice-President, John L. Merriam; Secretary, Geo A. Hamilton; Treasurer, Horace Thompson; Chief Engineer, F. McNamara; Directors, Russell Blakeley, John Farrington, Henry M. Rice, George Culver, Frank Steele, William D. Washburn, Henry H Sibley, James E. Thompson, Horace Thompson, H. L. Bigelow, W. F. Dunbar, H. C. Smith, of Le Sueur; T. A. Harrison, of Minneapolis; John S. Prince and R. H. Hawthorne.

A meeting of the Wilmington & Manchester Railroad Company was held at Wilmington, Nov. 30. H. M Drane was elected President.

Resolutions were adopted authorizing the re-issue of bonds funding or capitalizing interest now due, and the President and Directors be authorized to raise funds by loan, and to thoroughly equip and put in good running order the road. This road running hence to Charleston is the link of the Great Southern Coast route.

A correspondent of the Nevada (Cal.) Gazette, writing from Lincoln, says:

There is now a fair prospect of the railroad to this place being extended to Marysville, to connect with the Oroville road, and also of adding the connecting link from Folsom to the city. Col. Wilson, who has been East to perfect the arrangements for iron and stock, will be here by the next steamer (part of the rails having been landed below), and then "the work will go bravely on."

The Dubuque City Council have voted to douate to the Illinois Central and Dubuque & Sioux City railroads sufficient grounds for a union depot, and also the rights of way across certain streets, provided the Illinois Central Railroad would bridge the Mississippi at or near Seventh street. The Illinois Central has accepted this offer, and decided to bridge the river at that point.

An interesting case was argued before the Supreme Court of New Jersey, in session at Trenton during the present term—Mr. Ripley bringing a suit against the New Jersey Railroad Company for damages. The plaintiff had a ticket entitling him to one passage each day for a year; this he lost, and the company refused to allow him a passage without it. The decision will be given at the next term.

According to the census returns there were in 1859, 20,000 miles of completed railway in the United States, costing $500,000, and 12,000 miles under construction. In 1828 there were but three miles; in 1830, 41; in 1840, 2,200, and in 1850, 7,400 miles. Great Britain has 7,500 miles; Germany, 5,000, and France, 2,000.

An arrangement has been made between the North Missouri and the Hannibal & St. Joseph roads, to continue for ten years, by which a uniform tariff of freights may be established. For nine months the Hannibal is to receive $55, and the North Missouri $45, the balance of the year the scale to be reversed.

There is now a prospect for the completion of the Hoosac tunnel, as it is found to be in the most direct and feasible route from Boston to the West The whole length of the tunnel is to be 25,574 feet, and its cost is estimated at about $3,250,000. It is expected that the State will assist this work.

The Commissioners lately appointed by the President to examine the recently opened sections of the Union Pacific Railroad in Kansas, arrived here last night, en route for Washington. They report the road completed for sixty miles from its eastern terminus, Wyandotte.

The Grand River Valley Railway Company advertise for sealed proposals to furnish the ties and built the bridges on fifty-five miles of its line to Grand Rapids. Three hundred laborers are now at work on this line.

Arrangements are in progress for building the St. Louis, Vandalia & Terre Haute Railroad, to pass near Collinsville, Troy and Highland. It is intended to compete with the western portion of the Atlantic & Great Western Railway.

Trains are now running to Clarksville, on the Edgefield & Kentucky R. R. The Memphis branch of the Louisville & Nashville road will hereafter connect with this road at State Line.

Sixty-one miles of the Georgia Central R.R., from Savannah to Station 6, are in operation. Thirty-five miles of the Augusta branch are completed, and the remaining twenty-nine will be completed in January.

The grants of public lands to the Northern and Central Pacific Railroads will exceed, by careful estimates, 125,000,000 acres of land. A southern route will be asked for during the coming session.

The consolidation of the Toledo, Peoria & Warsaw Railway Company and the Mississippi & Wabash Railway Company was consummated on Friday, at Peoria, a large majority of the stockholders favoring the transaction.

The capitalists of Detroit are waking up in good earnest to the importance of a direct railway communication to the northern part of the State. A public meeting for that object was held last Monday evening.

The Nashville & Chattanooga road is under a heavy pressure of business. Two hundred car loads of freight now await transportation at Nashville, and about one hundred and seventy five car loads are at Chattanooga.

At a meeting in Lawrence, Kansas, on the 23d, $80,000 were subscribed to the Lawrence & Fort Gibson road, and the instalment on the amount previously subscribed, paid in. Theo. Carney was elected Vice-President.

The managers of the Louisville & Nashville Railroad have notified shippers that they must withbold their offers of freight until the accumulations of stuff are forwarded.

Two bandsome cars, the first produced at the new sbops of the Indianapolis & Cincinnati Railroad Company were put in service the other day.

The Atlantic and Great Western R. R. took possession of the Catawissa Road on the 2d inst. The president of the road has been made the general manager.

The South Carolina Railroad. — This railroad is completed to within twelve miles of Columbia. It was expected cars would run through on the 20th ult.

Brigham Young has promised to build that portion of the Pacific Road that will run through Utah.

Passengers can now go through by rail and steam from Memphis to Grenada, horse cars having been abolished.

The first rail on the Pike's Peak road was laid on the 23d. About 20 miles are nearly completed.

The Philadelphia Press urges the granting by the Legislature, of all applications for railway charters, in order to insure the requisite competition.

The street railway companies of Detroit have doubled the fare of passengers after ten o'clock at night.

Charles Ellis, Esq., has been unanimously re-elected President of the Richmond & Petersburg road, and Messrs. R. B. Haxall, B. W. Haxall and Thomas H. Wynne, elected Directors.

A meeting called by the Mayor was held in Macon, Georgia, last Tuesday to forward the completion of the Macon & Augusta railroad.

St. Louis county is liable to the amount of $4,850,000 in aid extended to the several roads centering in the city of St. Louis.

J. E. Ainsworth is the Chief Engineer of the Dubuque & Sioux City road.

Nine passenger trains run daily between Baltimore and Washington.

### Railroad Accidents for the Week.

Fatal Railroad Accident. — About 11 o'clock, P. M. Nov. 29, as the through train for Richmond, which left Wasbington at 8:30 P. M., was passing over the road, near Warrenton Junction, one of the cars was thrown from the track and dragged some distance. The brakeman and two soldiers were instantly killed. A lady and twenty-eight soldiers, belonging to the 96th New York Volunteers, were badly injured, several having their limbs broken.

On the same day, a freight train on the Mississippi Central Railroad ran off the track smashing eight cars. No one was severely injured.

In Jersey City, on the 29th ult, as some workmen were engaged in running a large new locomotive over a temporary track from the machine shop to the New Jersey Railway, the engine was "fired up," and, by an unexpected shifting of the valve, it ran into and crushed the vault under the side-walk, and pushed through the cellar wall of a four story house at the corner of Railroad ave. and Washington st., seriously alarming many persons, but injuring no one.

The Cincinnati Express train, due at New York at 6.30 A. M. Nov. 28, ran off the track at Tivoli, on the Hudson River Railway, smashing up the engine, tender, and baggage car, but, fortunately, no one was injured. The switch was placed the wrong way, and the only excuse the man had to give was that he did not think it time for the train to arrive. He very soon after disappeared. The train was delayed eight or nine hours.

A terrible railroad accident occurred on the New Jersey Central Railroad, Dec. 1, near White House, New Jersey, resulting in the death of seven, and severe injuries to a number of others. Part of a coal train become detached on an up grade, and ran back with greeat momentum, plunging into an express train, causing the first passenger-car to run through the baggage-car with the disastrous result to life and limb above mentioned.

The truck wheels of an engine on the Northern Central road of Maryland, broke the other day, resulting in the death of a brakeman and the smashing of several cars.

### PERSONAL.

D. A. Olin, Esq., Ass't Sup't of the Milwaukee & St. Paul Railway, slipped while stepping from one car to another, injuring his leg so badly as to require amputation.

Presentation —A fine Nardin chronometer, with massive gold fob chain attached, was presented to Mr. Louis Williams, Ass't Sup't of the C. H. & D. Railroad, by Judge Stanley Mathews, on behalf of the employees of the road, on the 29th ult. Also, salver, pitcher and pair of gold-lined goblets, to Mrs. S. D. Williams. Judge Mathews said that the present was contributed to by two hundred employees, and showed the high regard in which Mr. Williams was held by his co-laborers.

The following gentlemen were elected Directors and officers of the Baltimore, Cantonville & Ellicott's Mills Railway: William Wilkins, Herman H. Grane, George M Gill, Wm. F. Frick, Benjamin Whitely, D. C. Howell and M. Benzinger. Mr. Wilkins was chosen President, Herman H. Grane, Vice-President, and William W. Orndoff, Secretary and Treasurer.

## MONETARY AND COMMERCIAL.

We have this week, the report of the Secretary of the Treasury. He adheres to his policy of funding the currency, but considers that the retirement of not more than $200,000,000 in additiou to the compound notes, will he sufficient to restore specie payments, and that the contraction cannot be too rapid. The report has reached us too latc for review this week.

The following were the quotations for exchange and coin:

| | Buying. | Selling. |
|---|---|---|
| New York | par@50c | 1-10 prem |
| Philadelphia | par@50c | 1-10 prem. |
| Boston | par@50c | 1-10 prem. |
| Gold | 147½ | 148@148¼ |
| Silver | 140@141 | 142@143 |

New York stock quotations compare as follows:

| | Mon. A. M. | Tues P. M |
|---|---|---|
| U. S. 6 per cent. Bonds, 1881 | 107 | 107¼ |
| " 5-20 " old | 101½ | 101½ |
| " 5-20 " 1864 | 99½ | 99⅝ |
| " 5-20 " 1865 | 99½ | 99⅝ |
| " 10-40 " | 90¼ | 90⅜ |
| " One-year Certificates | 97⅝ | 97⅞ |
| 7-30s, 1st series | 97¼ | 97½ |
| 7-30s, 2d series | 9 | 96⅝ |
| 7-30s, 3d series | 96⅝ | 96⅞ |
| New York Central | 97½ | 97⅝ |
| Erie | 91½ | 92⅛ |
| Hudson River | 108⅝ | 109½ |
| Reading | 115½ | 116¼ |
| Michigan Central | 115⅜ | 116 |
| Michigan Southern | 74½ | 75⅜ |
| Illinois Central | 131½ | 132 |
| Cleveland & Pittsburg | 92 | 93½ |
| Chicago & Northwestern | 35 | 36⅜ |
| " " pref | 64½ | 65½ |
| Cleveland & Toledo | 103⅜ | 103 |
| Rock Island | 106¼ | 107½ |
| Pitts., Ft. Wayne & Chicago | 105½ | 106½ |
| Ohio & Mississippi Certificates | 28⅞ | 28½ |

The Cincinnati *Gazette* says:

Before the Treasury report was made public, a strong effort was made to force stocks up and a slight improvement was established, but hy 3 o'clock this improvement was lost, add the market closed dull. The outside public have for some time refused to huy railroad stocks, and the great bulk of the speculative shares is now carried by New York brokers. Whenever these operators undertake to sell, prices give way, and it is only hy holding, which an easy money market enables them to do, that prices are maintained. The outside public cannot be made to believe that railway shares are either cheap or safe, at present while Government six per cent. gold honds are selling at par, and 7-30 currency honds at 97, and 6 per cent. is paid for temporary loans hy the U. S. Treasury, and they consequently stubbornly refuse to invest.

### Railroad Earnings.

Third Week in November—

| | 1865. | 1864. | Increase. |
|---|---|---|---|
| Northern, of Canada (18th) | $8,635 | $4,861 | $3,774 |
| Racine & Miss. (21st) | 15,093 | 13,808 | 1,285 |
| Michigan Southern | 114 278 | 102,020 | 12 258 |
| Chicago & Rock Island | 72,063 | 86,797 | * 14,734 |
| | | | * Decrease. |

Fourth Week in November—

| | 1865. | 1864. | Increase. |
|---|---|---|---|
| Gt. West'n, of Canada (24th) | $75,466 | $56,437 | $19,020 |
| Detroit & Milwaukee (23d) | 41,259 | 30,052 | 11,198 |

For the month of October—

| | 1875. | 1864. | Increase. |
|---|---|---|---|
| North Pennsylvania | $83,299 | $62,814 | $20,484 |

The traffic receipts of the Great Western Railway of Canada, for the past two months, exhibit an increase over the business for the corresponding period of last year of $140,000, and the receipts for the week ending the 27th over $26,496 above those of the corresponding week last year.

The activity in Pittsburgh, Fort Wayne and Chicago shares continues, and as high as 106 has been paid for the stock. The friends of the road are confident that the income account of 1865 will be substantially as follows:

| | | |
|---|---|---|
| Earnings of 1865, say | | $8,900,000 |
| Expenses at 60 per cent. | $5,340 000 | |
| Interest on Sinking Fund | 1,022.945 | |
| Ten per cent. on Stock | 737,709 | |
| Balance | 829,346 | $8 900,000 |

The earnings of the corporation, since the line was completed to Chicago, have been as follows:

| | | | |
|---|---|---|---|
| 1859 | $1,065.987 | 1863 | $5,122,933 |
| 1860 | 2,335 353 | 1864 | 7,126,465 |
| 1861 | 3,031 887 | *1865 | 8,900,000 |
| 1862 | 3,734,390 | * Partly estimated. | |

The Cleveland & Pittsburg R.R. Co. has declared a dividend of 4 per cent., payable Jan. 10. The books close on 15th December.

The *Evening Post* says:

The Michigan Southern Railroad Company is settling with the holders of the guaranteed stock as follows; In settlement of all claims for back dividends the holders receive 40 per cent. in common stock. On the conversation of the guaranteed stock that has been thus settled and assessed into common stock, the company gives one share of common stock and $35 in cash for each share of guaranteed stock surrendered. Thus the holder of 100 shares of guaranteed stock gets in exchange therefor 140 shares of common stock, and $3,500 cash. All settlements and conversions are to be made prior to the 15th day of January next.

The shipments of Pittston Coal for week ending Nov. 25, were:

| | |
|---|---|
| 1865 | $516,655 19 |
| 1864 | 724,312 04 |
| Decrease | 207,652 85 |

The following is a statement of coal transported on the Delaware and Hudson Canal for the week ending November 25, 1865, and for the season;

| | Week. | Season. |
|---|---|---|
| Del. and Hudson Canal Co | 24 610 | 686,057 |
| Pennsylvania Coal Co | 3,990 | 41 575 |
| Total tuns | 28,600 | 727,632 |
| For the same period last year: | | |
| Del. and Hudson Canal Co | 18,615 | 811,396 |
| Pennsylvania Canal Co | 9 481 | 485.679 |
| Total tuns | 28.096 | 1,297,075 |


**CLARK'S SCHOOL VISITOR.**

VOLUME X.

A DAY SCHOOL MONTHLY.

The VISITOR will commence its *tenth volume* with the January number, 1866. This is the only *Day School Periodical* published at

SEVENTY-FIVE CENTS A YEAR!

Magazine form, beautifully illustrated. New type, new features; Readings, *Music*, Speeches, *Dialogues*, Stories, *Puzzles*, Enigmas, *Rebuses*, &c., from the very best writers.

The VISITOR has the largest circulation of any Educational Journal published. Now is the time to form clubs.

The Publisher, in order to reach all parts of the country, will send the VISITOR *one year*, FREE, *to one person* (who will act as agent) *at any Post Office in the United States.*

Address, with five cents for particulars,

J. W. DAUGHADAY, Publisher,

1308 Chestnut Street, Philadelphia, Pa.

*** Exchanges copying the above and sending a marked copy, will receive the "Visitor" for one year.


## RAILROAD OFFICES AND AGENTS.

**Atlantic & Great Western Railway**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord, General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A. B. Waters, Freight and Ticket Agent, Cor. Third and Walnut.

**Ohio & Mississippi**

W. E. Bruce, Freight and Ticket Agent, Gazette Building, 82 West Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J. R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg, Contracting Agent, Vine St. under Burnett House.
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent, " "

**Central Ohio & Pittsburg, Columbus and Cincinnat**

James E. Shields, General Agent, No 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A. J. Day, S. W Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J W. Burch, General Eastern Agent, No. 2 Burne House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fonrth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burn House.

**New York Central.**

G. B Gibson, S. W. Passenger Agent. W. H. Page Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Ittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent, No. 5 East Front St

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.

Best Route to St Louis and Chicago

MONDAY, OCT. 31.

## Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 1[illegible]0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt

---

BENJ. H. LATROBE AND C. H. LATROBE,

CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.

Through to Pittsburg without Change.

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent.
my31 Pittsburg, Pa.

---

Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:00 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:30 A. M. | 10:40 P. M. |
| HAMILTON ..... | 9:57 " | 11:43 " |
| DAYTON.. ..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:45 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:05 A. M. |
| PITTSBURGH..... | 9:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

Ample time is allowed, at all hours,

for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, } Passenger Agents.
CHAS. COOK, }

---

## CENTRAL RAILROAD

—OF—

NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Kas on with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6:30 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

---

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twedty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:00; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.) 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); 2. m (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 8:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

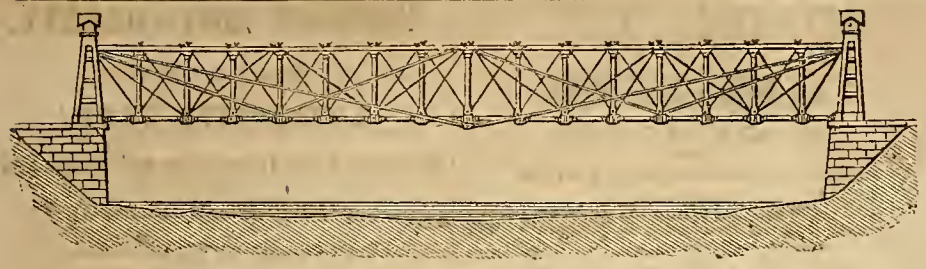
JAMES H. HOYT, Superintendent.

---

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



(*Plan of Bridge.*)

## FINK'S PATENT
## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

## SCREW BOLTS,

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

## LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

## KNOX & SHAIN,

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

## FINDINGS,

AND

## MACHINERY,

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

## Chilled Wheels and Tyres

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

## AMERICAN BANK NOTE COMPANY.

***Bank Note Engravers & Printers.***

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

## SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

## RAILWAY SPRINGS.

**FREIGHT**





*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y.

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,
54 Exchange Place, New York.

---

## W. M. F. HEWSON,

**STOCK BROKER,**

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collections.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH, *Master Transportation, Baltimore*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M. |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M. |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent.

W. D. ORISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place unites with Railroads for and from all points In the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

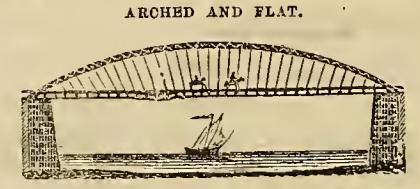
## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

## CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9.

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 Inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 Inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!



## FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P. M. night.

On Sundays, 4.30 A. M.; 11.30 P. M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M. (Express.

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, DECEMBER 14, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A sqnare is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

W. A. MUNSELL,
*General Agent.*


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | *Depart.* | *Arrive.* |
|---|---|---|
| Cincinnati Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:00 P. M. | 4:00 A. M. |
| Morrow Accommodation | 5:30 P M. | 8:00 A. M. |
| Night Express | 7:00 P. M. | 3:50 P. M |
| Night Express | 10:00 P. M. | 9:40 A. M. |

MARIETTA AND CINCINNATI,

| | | |
|---|---|---|
| Mail | 5:00 A. M. | 7:20 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P. M. | 5:45 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Indianapolis & Cambridge City | 7:00 A. M. | 9:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:50 P. M. |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P M. |
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| Dayton Accommodation | 6:45 P. M. | 9:35 P. M. |
| Dayton, Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A. M. |
| Richmond & Chicago | 5:30 P. M. | 1:10 P. M. |

CHICAGO & GREAT EASTERN.

| | | |
|---|---|---|
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " " | 5:30 P. M. | 1:20 P. M. |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Mail & Springfield Express | 2:00 P. M. | 4:30 P. M. |
| St. Louis and Chicago Express | 7:30 P. M. | 1:10 A. M. |
| Lawrenceburg and Harrison Accommodation | 4:30 P. M. | 8:30 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:20 P. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R.

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M. | 4:35 P. M. |
| Caboose Accommodation | 4:00 P. M. | 8:00 A. M. |

KENTUCKY CENTRAL.

| | | |
|---|---|---|
| Express | 6:00 A. M. | 6:30 P. M |
| Accommodation | 1:30 P. M. | 11:00 A. M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Morning Express | 9:40 A. M. | 6:30 P. M. |
| Night Express | 10:30 P. M. | 7:30 A. M. |

### Direct Railroad Route of Cincinnati to the Southern Seaports, via Cumberland Gap.

The subject of a direct Railroad from Cincinnati to Knoxville, or some point in East Tennessee, whence communications exist with all the Southern seaports, is seriously discussed by all parties interested in such a project. Public meetings have been held in several counties of East Tennessee, and in Kentucky; and one is proposed in Cincinnati. Exactly the same discussions and proceedings have been had in three or four different periods, during the last thirty years, without producing any other effect than the road in Kentucky from Covington to Nicholasville, and the grading of a portion in East Tennessee. We hope now, that with a united and vigorous effort, what it has taken thirty years to fairly begin will be accomplished. South Carolina and East Tennessee have earnestly and fairly done their part, till the war interrupted all work in the South on internal improvements. South Carolina had completed the Blue Ridge a large part of the way to the Rabun Gap, in the North-east corner of Georgia, and did a great deal of work on the residue. Tennessee has a law (still in effect) granting $10,000 per mile to roads graded, which is applicable to the road from the Kentucky line to Knoxville, or any other point on the proposed lines. The difficulty is, and has been, in constructing the line through Kentucky. By very great efforts and city subscriptions from the corporations of Cincinnati and Covington, a direct line has been finished to Paris, and if the reader chooses, to Nicholasville; for at Paris the road turns to the South-west, and is so far out of the way. There is in fact about 200 miles to be constructed to reach an available point connected with the Southern system of Railroads. The problem is, on what route, and in what manner, can that route be made best? The great interest of Cincinnati, and the immense public dealing with Cincinnati, is *to have the road made.* But there is a choice of routes; and very naturally, there are various local interests involved in the determination of this question. In fact, there are three different routes, on which the road may be made; and the choice, in fact, should depend on which of these routes the best connection can be made with the Southern Atlantic? There is a fourth route proposed through McMinnville, but, *that* is not a route to East Tennessee; but, a direct route to Middle Tennessee, which is very desirable, but need not be discussed in considering this question. The three routes, which may be taken are, 1. From Paris to Richmond (Ky.), thence to Cumberland Gap, thence, to Tazewell (Tenn.) (Notchee Gap) to Morristown (on the Knoxville and Virginia Road), and Paint Rock (on the North Carolina line). 2. The second line is to Cumberland Gap (or Williams' Gap), thence to Knoxville, and there connecting with the Southern Roads. 3. A third line has been recently proposed by Gen. Wilder, which turns to the West, from Danville, strikes the Cumberland River much farther down than the other route, and by turning eastwardly along the foot of the mountains, avoids the difficult hills of Laurel and Rock-Castle Rivers. There is no doubt, that is, *constructively*, the easiest route; but, it is just as clearly the longest,—which is the cheapest, engineers only can determine. It has been said, that the route by Cumberland Gap can not be made; but this is a mistake. It can be made, as easily as many roads across ridges have been. The whole route was surveyed by Captain Williams, in 1836, and pronounced practicable at a moderate cost. Besides, to make the same line, it need not be made exactly through Cumberland. There is an easy passage west of it, probably the same Gen. Wilder has in view. The great difficulty will be not to determine the route, but to raise the means for construction on any route. We shall now notice some of the proceedings already had, and the objects in view and to be obtained by either of these routes.

1. In reference to the East line, or Cumberland Gap route proper. A charter was granted in 1854, by the Tennessee Legislature to a company, entitled "The *Cincinnati, Cumberland Gap & Charleston Railroad.*" The object of this Company was to make a railroad from Cumberland Gap, where it would connect with the "*Kentucky Union Railroad,*" chartered by Kentucky, to pass through Tazewell, Beaus Station, Notichucky River, to "Paint Rock" on the French Broad; thence to Asheville, (N. C.) The Company was organized the same year, at a meeting in Tazewell (*see* R. R. RECORD, vol. iii. p. 213), and Mr. CANIGER elected President. This route was surveyed by Captain Owens. At a meeting in June, 1855, the route through Tennessee was located *via* Tazewell, Beans Station, and Morristown (on the Virginia & Tennessee Road), for thirty miles, beginning at Morristown and going north towards the Gap. This surveyed distance of this section was 33 31-100ths miles, and estimated for grading at about $400,000. This road is entitled to $10,000 per mile for the iron, etc., and at the original estimates would in all cost in round numbers $25,000 per mile; but in these days, can not be counted at less than $40,000 per mile. A portion of this route has been graded, but the commercial shocks at the close of 1854, and in 1857, put an end to the hopes of procuring means; then the war came and we have heard no more of it. But, it is quite obvious, that this route has some advantages, which can not be overlooked, and which we will here state, that they may be fairly looked at.

1. It is the only route which takes the valley of the French Broad, and connects *directly* with the North Carolina Roads. The

North Carolina road is already finished to Morgantown, and a short distance more will take it to the French Broad, and make a direct line from Cincinnati to all the seaboard of North Carolina and Virginia, an advantage which is almost beyond estimation.

2. This is much the shortest route through Tennessee to the Atlantic States. The entire road, from Cumberland Gap through Tennessee is less than 90 miles.

But, it is conceded that this is not the most direct route to Georgia. That would be either through Knoxville, or west of it. In order to see what would be the relative distances on several routes, we give the following tables viz.:

| | |
|---|---|
| Cincinnati to Knoxville *via* Cumberland Gap and Morristown..... | 319 miles. |
| Cincinnati to Knoxville *via* Air line from Cumberland Gap..... | 266 " |

By any line which can be constructed from the Gap to Knoxville, the distance *via* Morristown will not be greater by more than 40 miles, than the route by Morristown; so that in fact, the Georgia connection is made in only 40 miles more distance.

The following are the distances to Lynchburg (Va.), by the two routes:

| | |
|---|---|
| Cincinnati to Knoxville *via* Dauville..... | 277 miles. |
| Knoxville to Bristol, or Va. R.R... | 130 " |
| Bristol to Lynchburg..... | 204 " |
| Aggregate..... | 611 miles. |

Same route *via* Cumberland Gap R.R.

| | |
|---|---|
| Cincinnati to Cumberland Gap..... | 224 miles. |
| Cumberland Gap to Morristown.... | 44 " |
| Morristown to Bristol..... | 86 " |
| Bristol to Lynchburg..... | 204 " |
| Aggregate..... | 558 miles. |

There is a saving of 53 miles in the route to Lynchburg and Southern Virginia.

| | |
|---|---|
| Cincinnati to Charleston (S.C.) *via* Knoxville and Rabun Gap..... | 699 miles. |
| Cincinnati to Charleston (S.C.) *via* Montgomery and Paint Rock.... | 647 " |

Here again is a saving of 52 miles; but it is not our purpose to dwell on this route, further than to show what is urged in its favor by its friends, nor to choose between these routes. We shall consider the second and third routes, we have mentioned, hereafter. In the mean time, the magnitude of the object will be understood, when we say, that the entire route from Charleston to Cincinnati may be made *in twenty-four hours*, and that from Lynchburg to Cincinnati in less time. When this shall take place, as it ought to as fast as men can make it, then the imagination can hardly conceive, how much greater and better will be the intercourse between the South and the Central West.

---

There is much bitterness between the engineers of the steam cars and the drivers and conductors of the horse cars in Washington, and the Chronicle calls for the suppression of steam altogether as a draft power for street cars.

### Strong Hint to the Western (Mass.) Railway Managers.

The following from the columns of the *Advertiser* is pertinent enough to the lack of enterprise, sagacity and business capacity shown by the Managers of the Western Railway. If the newspaper accounts of the detention of the western freight at Albany are one half true, the shareholders of the Western Railway should organize a reform in their Board of Directors at once:

"The Chicago, Burlington & Quincy Railroad Company have commenced laying a second track on their road It is intended to have a double track all the way from Chicago to Galesburg. Large additions are being made to the rolling stock of the road."

The above statement was made in our financial article yesterday. It shows the way they do business out West, where labor is high, capital scarce, and money dear. But in Massachusetts, where we have labor and money enough, and might have business enough, we neither have a double track to Albany, nor have half an equipment, so that freight for this city is absolutely refused. And our only consolation is the assurance that "nobody's to blame."—*Am. Railway Times.*

So long as the Hoosac Tunnel remains unfinished, the daily growls at the Western R. R. will be unheeded. It has had the monopoly of the freighting for years, and enjoys the reputation of being the slowest and safest road in the country. Shippers have found it to be fully as expeditious to send by propeller and sailing vessel either east or west. If this road can not supply the demands of the Central and Erie Canal, what will be done when the Albany & Susquehanna connects with the Erie at Binghamton, and increases the flood of passengers and freight Eastward?

That there has been a willful squandering of money in making the tunnel, is undeniable, but that its completion is a necessity, and a fixed fact, sooner or later, is equally undeniable. Perhaps *then*, the unaccommodating spirit of the Western Corporation may be remembered against them.

---

### Look to your Policies.

The Supreme Court has lately decided a case of great public importance. The case was that of Keith vs. The Quincy Fire Insurance Co., on a policy of insurance containing a clause to the effect that if the building insured was unoccupied for the space of one month, without notice to the office, the policy to be void. The building insured was a trip-hammer shop, used in connection with other shops, and often not required to be used for weeks together, and sometimes months, but always kept in working order, with tools and everything in place when wanted. At the trial before the jury the court ruled that "it is not sufficient to constitute occupancy that the tools remained in the shop, and that the plaintiff's son went into the shop almost every day, to look around to see if things were right; but some practical use must have been made of the building—and if it remained without any practical use for the space of thirty days, it was, within the meaning of the policy, an unoccupied building for that time, and the policy became void." The full bench have sustained that ruling.—*Transcript.*

Corr. Am. Mining Index.

### Petroleum.

As a matter of common interest to all concerned in the development of the mineral resources of Kentucky, I desire to call your attention to the progress of events in the oil region of Cumberland County, a region apparently destined to become as productive in oil as any other in the country, not even excepting Venango County, Pa. Let me premise by saying that I have not a dollar's interest in any lands in that section of the State, and my testimony may be accepted as the truth; "to the best of my knowledge and belief." It is probably known to you that the first great oil well struck in this country was at Burksville, Cumberland County. This well was bored for salt in 1829, and the following account of it is given in Niles' Register of August 29th of that year:

GEOLOGICAL PHENOMENA.

"Some months since, in the act of boring for salt water on the land of Mr. Samuel Stockton, in Cumberland County, Kentucky, a vein of pure oil was struck, from which it is almost incredible what a quantity of this substance issued. The discharges were by floods, at intervals of from two to five minutes at each flow, vomiting forth many barrels of pure oil. I witnessed myself on a shaft, that stood upright by the aperture in the rock from which it issued, marks of the oil twenty-five or thirty feet perpendicularly above the rock. These floods continued from three to four weeks, when they subsided to a constant stream affording many thousands of gallons per day. This well is situated between a quarter and half mile from the banks of the Cumberland River, on a small creek down which it runs to the river. It was traced as far down the Cumberland as Gallatin, in Sumner County, nearly three hundred miles — for many miles it covered the whole surface of the river, and its marks are now found on the rocks on each bank. About two miles from the point where it touched the river, it was fired by a boy, and the effect is said to have been grand beyond description. An old gentleman who witnessed it, says he has seen several cities on fire, but he never witnessed anything like the flames which rose from the bosom of the Cumberland to the very clouds (to use his own words). The oil has a very strong scent, and was, while it issued in great quantities, smelt five or six miles above its entrance into the river." * * * * * This well produced oil in diminishing quantity for many years, and, in the aggregate, perhaps as much as any of the great wells on Oil Creek or Pithole have done. Two other wells, likewise bored for salt about the same time — the Croghan well, below Burksville, on the Cumberland, and the Garnett well, on Crocus Creek, both in the same county — were both flowing oil wells, and yielded a quantity scarcely less than did the first mentioned or American well. A small portion of the oil from these wells was bottled and sold as a medicine, but the time had not yet come for the value of petroleum to be appreciated, and it was generally regarded as a curse rather than a blessing, as it thwarted the purpose then had in view in sinking wells, namely, the manufacture of salt. So for more than thirty years, the oleaginous wealth of Cumberland county remained unknown, or at least unvalued, and its fountain wells were only objects of ignorant wonder. As soon, however, as the discovery of the application of petroleum to the wants of civilized life, and the success of the experiments made to obtain it on Oil Creek became generally known the attention of oil-men was called to the re-

gion bordering the Upper Cumberland, formerly so productive, and operations were commenced for its development in the fall of 1860. In the spring of 1861, two wells were bored near Burksville, and at the depth of less than two hundred feet, oil in large quantities was obtained in both. Before either of these wells could be pumped, however, this country became too hot to hold Northern men, and all oil operations were arrested by the war. From that time to June of this year, Cumberland County was overrun by guerrillas, or occupied by portions of both armies, and nothing could safely be done in oil. With the surrender of the armies of Lee and Johnson, the guerrilla bands, who had been the terror of this district here as elsewhere, suddenly disappeared — showing distinctly, that they were branches of the rebellion tree that withered and died when the trunk was cut — and S. E. Kentucky became as great and safe as ever before the war. With the advent of peace, oil operations were resumed in Cumberland county, and several new wells are commenced by companies organized in New York and Pittsburgh. In a well bored by one of the New York companies, about the middle of September, near the mouth of Crocus Creek, at the depth of 190 feet a crevice was struck from which oil flowed in such quantities as to deluge the surroundings of the well and cover the Cumberland river precisely as the old American well. From that time to the present this well has produced not less than 500 bbls. of oil per day, as an average—though ranging widely from this figure both above and below. Until the well was tubed a large part of the oil flowing from it escaped through the cliff, in which it is located, into the Cumberland — since being tubed it has alternately flowed and been pumped—when flowing producing 800 to 1000 bbls. per day — when pumped, yielding according to the energy with which it had been worked — as the company owning it had but limited tank capacity to receive the oil, they have not used the productiveness of the well. The last report I have from them, says: "the well is yielding 800 bbls. per day." The oil from the Crocus well is dark green in color, and has a gravity of 35 deg. Beaume. It is the opinion of Prof. Newberry, the geologist —whose judgment, in all matters relating to oil, has great weight here— that, rich as it is, but little over 100 feet below the bottom of the river, and having this gravity, this must be regarded, as in some sense surface oil, part of its naptha having escaped, and that deeper wells sunk in the region under consideration will furnish lighter oil and still larger quantity. Prof. N. also states in his reports, that the rocks which furnish oil in the Cumberland district are older than any that yields oil in quantities in other localities, and that they are of Lower Silurian age the equivalents of the Trenton Group of New York. Oil has been struck in several other wells near Burksville, since I was there, but in what quantity I am not informed. Probably you will hear something from them of others. I have designedly confined my remarks in this letter mainly to the Crocus well, as in regard to that I know whereof I affirm. The Cumberland river is navigable for steamboats to and above Burksville during eight months of the year, and oil can be taken down it in flat boats at all seasons. By this means this district, which promises to be so productive in oil, may have direct water communication with nearly all parts of the Mississippi Valley. For exportation oil can be delivered at New Orleans at one dollar per barrel freight.

T. W.

### The Mineral Lands of the United States.

Hon. Hugh McCulloch, Secretary of the Treasury, in his report to Congress, says:

The attention of Congress is again called to the importance of early and definite action upon the subject of our mineral lands, in which subject are involved questions not only of revenue, but social questions of a most interesting character.

Copartnership relations between the Government and miners will hardly be proposed, and a system of leasehold, (if it were within the constitutional authority of Congress to adopt it, and if it were consistent with the character and genius of our people,) after the lessons which have been taught of its practical results in the lead and copper districts, cannot of course be recommended.

After giving the subject as much examination as the constant pressure of official duties would permit, the Secretary has come to the conclusion that the best policy to be pursued with regard to these lands is the one which shall substitute an absolute title in fee for the indefinite possessory rights or claims now asserted by miners.

The right to obtain a "fee simple in the soil" would invite to the mineral districts men of character and enterprise, by creating homes, (which will not be found where title to property cannot be secured,) it would give permanency to the settlements, and by the stimulus which ownership always produces, it would result in a thorough and regular development of the mines.

A bill for the subdivision and sale of the gold and silver lands of the United States was under consideration by the last Congress, to which attention is respectfully called. If the enactment of this bill should not be deemed expedient, and no satisfactory substitute can be reported for the sale of these lands to the highest bidder, on account of the possessory claims of miners, it will then be important that the policy of extending the principle of pre-emption to the mineral districts be considered. It is not material, perhaps, how the end shall be attained, but there can be no question that it is of the highest importance, in a financial and social point of veiw, that ownership of these lands, in limited quantities to each purchaser should be within the reach of the people of the United States who may desire to explore and develop them.

In this connection it may be advisable for Congress to consider whether the prosperity of the treasure producing districts would not be increased, and the convenience of miners greatly promoted by the establishment of an assay office in every mining district from which an annual production of gold and silver amounting to ten millions of dollars is actually obtained.

---

An Invention.—H. R. Leonard has just finished the pattern of railroad car wheels and axles embodying a principle which he claims to be new and important. The patent right has been applied for. This new arrangement is expected, when applied to railroad trains, to do away with all friction in making curves. All slipping would be avoided, and one wheel will accommodate itself to the speed of the others. The shaft or axle is cut in two in the centre of its length. There is then put on a sleeve or cylindrical tube, three feet long, equally, over the joint in the axle. One end of the sleeve is "shrunk" on to the axle. Stationary at the end of the sleeve and stationary on the other part of the axle is a stationary collar over which a coupling is screwed, holding the two half shafts or axles together. Railroad engineers think the invention a valuable one, and that it will answer the purpose intended. In a short time tracks will be arranged for the purpose of exhibiting what the invention can do. — *Sacramento (Cal.) Bee.*

The above description will apply to a model of an axle in this office, invented by Samuel L. Tenney, of Christiana, Pa., and advertised in the Record, from 1854 to 1858. Mr. Leonard's invention, therefore, will hardly obtain a patent for originality.

### Relief for Street Car Horses.

Mr. H. H. Court of Detroit, deserves an equine vote of thanks for the following invention:

The apparatus consists of a pinchbar suspended between the wheels of the car, from a jaw bolt and knuckle-jointed lever. The pinch bar is operated by a horizontal rod or lever, which is attached to the cleves or draft iron of the car. As the horses start from a full stop the bar is operated and the car thrown ahead, the strain upon the horses being about one-twentieth of that exerted without the bar. As soon as the bar has exerted its full power it is drawn by a spring clear of the track, and so remains until another stop, when it hooks itself into connection and is again ready for operation. The whole apparatus is self acting, or operates by the mere stopping or starting of the horses, is very simple in construction and little likely to get out of order.

---

Electricity from Waterfalls.—M. Gazal, a French savant of some eminence in the scientific world, has devised a plan by which to utilize the forces of waterfalls, not only upon the spot, but at a great distance from the fall. By this plan the mechanical force of the fall is converted into electricity by the action of the water upon a combination of wheel-work, somewhat similar to that of an ordinary water-mill for grinding corn or sawing lumber, only that his mechanism will act upon a magnetic electrical apparatus. The electricity thus developed in bulk will be conveyed to any distance by the means of insulated tubes. The economy of the process is as remarkable as its physical character.

By it sufficient magnetic force can be generated by an ordinary fall of water to work all the telegraph lines of a continent. The Genesee Falls, which are a thing of beauty in high water, and always of practicable value to the "Flour City," can, under this invention, electrify the world.

---

Compressed Air on Street cars.—An experiment is soon to be tried on the street cars between Albany and West Troy, New York, to test the efficiency of compressed air as a motive power. The air is to be compressed at each end of the route, and placed in reservoirs of cast iron able to resist a pressure of 300 pounds to the square inch. Each car is to be supplied with one of these reservoirs at each end of the route, which will run the car ten miles. The air is to be supplied to cranks in a manner similar to steam. The economy of this motive power, it is supposed, will revolutionize street railway management. It will be a good thing, if successful, for passengers will not feel that their own comfort in riding is at the expense of overtasked horses.

### A Fine Testimonial.

A few weeks since, Charles H. Hurd, Esq., one of the widest known attaches of the Michigan Central Railroad, and for some years its Assistant Superintendent, resigned his position among the officers of that company. The intelligence, of his retirement was received with regret by the business public at large, and especially by the army of employes of that corporation, with whom his official duties had brought him in contact, and among whom his popularity was unlimited and universal. As a substantial proof of their feelings, his friends decided to present him with an appropriate testimonial. For this purpose subscriptions were taken up among the employes of the road throughout its entire line, and the presentation card ultimately contained the names of 841 donors. The gifts themselves amount in value to $5,000, and the formal presentation took place Nov. 30th, at Detroit.

The testimonial proper embraces over 100 pieces of solid silverware, of the most exquisite workmanship and finish, in unique and tasteful styles, provided with a strong and ornamental sideboard safe for their reception, the whole designed and manufactured expressly for this purpose. The safe is both burglar and fire proof, finished in such a style as to constitute a handsome piece of furniture, covered with a marble slab and fitted up in the interior with convenient shelves, drawers and compartments. It weighs over a ton, is provided with a Covert lock, and cost $700. The total value of the silver is but little short of $4,000. In addition to the above, R. N. Rice, Superintendent of the Central road, made a personal presentation to Mrs Hurd of a diamond set of pin and ear-rings, valued at $550.

---

New Jersey Iron Trade.—The iron trade of New Jersey is more important than has been generally supposed. A recent report shows that in 1864 the number of men employed in that State in extracting ores was 1,644, and the amount obtained 318,500 tons. Ten thousand tons of zinc and Franklinite ores were obtained. The iron ores imported from New Jersey into Pennsylvania are used almost exclusively in the Lehigh Valley for admixture with the local brown hematites. The market for New Jersey ores, in quantity, is bounded on the west by the Lehigh Valley; only very small lots penetrate west of the Lehigh, where, too, small lots of Lake Superior ores are occasionally used. The furnaces of Pennsylvania are mainly supplied with ores from their own vicinage. The quantity of iron ore smelted in Pennsylvania in 1864 was about two millions of tons, of which aggregate about ten per cent. consisted of New Jersey ores, imported into the Lehigh Valley.—*Stockholder.*

---

Manufacture of Steel Castings.—Letters patent have been granted to Mr. Thomas Edward Vickers, of Sheffield, England, steel manufacturer, for "improvements in the manufacture of steel castings," which he thus describes: "My invention of improvements in the manufacture of steel castings relates more particularly to casting heavy masses of steel, such as wheel-tires, gun-blocks, crank-axles, and other masses. The object of the invention is to prevent formation of large crystals, which are objectionable in steel castings. To this end, when the metal has been poured into the mould, or while it is being poured in, motion is imparted to the mould, so that the metal being in a molten or liquid state, is kept in continual motion or agitation. I do not confine myself to any particular motion, but I prefer an oscillating, reciprocating, or rocking motion, whereby the liquid metal will be gently agitated or moved in the mould. When the article to be cast is circular, such as railway wheels or tires, an oscillating or rocking movement of the mould will be found sufficient to set the molten metal in motion, and thereby prevent the formation of large crystals. For some articles an intermittent circular motion will be preferable, while for others a reciprocating movement will answer the purpose. Other motions or compound movements may be advantageously employed in some instances. The particular motion to be used for the purpose of my invention must, therefore, be left to the discretion of the manufacturer. The most convenient method of carrying out my invention is to mount or place the mould on a frame, to which the required motion can be imparted either by the hand of the workman or by mechanical means, such as by the use of a crank, eccentric, or other equivalent mechanism, and this motion may, if desired, be continued until the metal is quite set."

---

### New Safety Apparatus for Boilers.

At the meeting of the section on "Engineering" of the Society for the Promotion of Science, on November 21st, Mr. J. K. Fisher presented a drawing of an upright tubular boiler, in the upper part of which is a chamber half an inch deep, through which the upper ends of the tubes pass loosely, leaving annular spaces around them. Into this chamber water is pumped, from below, by a circulating pump, and forced downward through the annular spaces around the tubes, so as to keep the tubes wet, and prevent their becoming hot, and superheating the steam. The intention of the device was to prevent the injury which frequently occurred in fire engine boilers, when, for the sake of raising steam quickly, the water was purposely kept low, and the fire made as strong as possible; in consequence of which the upper part of the tubes become lengthened by heat, and pushed into the tube-sheets, and after a few instances of such treatment, become leaky; but since Mr. Wiard had shown good reason to believe that the superheating of the steam caused an undue heating of the boiler above the water, and that the difference of temperature probably in some cases helped to rend the plates, and cause explosions, he presented it as a contribution to the portfolio that was opened for plans to promote the safety of boilers.

Dr. Gale, the general secretary, has been appointed to receive such contributions; and the section will endeavor to make proper use of them.

---

☞ The organs of the iron-masters who so confidently asserted that free trade would be the ruin of all engaged in the iron trade in France, now boast that English manufacturers cannot compete with Frenchmen in the continental markets. The *Courrier du Bas Rhin* publishes a letter from Graffenstaden in support of its assertion, which states that the Baden Government having advertised to receive proposals for the supply of forty-six locomotives for railways to be constructed in that duchy, an English company offered to supply them for 70,710f. each. A Baden company demanded 55.700f., but the proprietors of the iron-works at Graffenstaden offered to supply them for 45,000f. so that the English company got no share of the contract.—*American Artisan.*

### Evansville & Crawfordsville R. R.

The annual report of this road shows it to be in a more prosperous condition than at any former period in its history, but its financial condition will not justify the payment of dividends.

The freight carried amounted to 99,986 tons, against 109,389 tons carried last year, the falling off being attributed to the termination of the war and the cessation of the demand for Government supplies.

The number of passengers carried (exclusive of troops) for the year is 180,067—an increase over last year of 56,319. The number of troops carried is 13,267—a gain of 910 over last year.

The revenue from all sources during the year has been:

| | | | |
|---|---|---|---|
| From passengers | $256,366 06 | Gain | $103,749 86 |
| " troops | 20,057 78 | Loss | 377 89 |
| " freight | 260,286 34 | Loss | 413 40 |
| " express | 12,802 50 | Gain | 4,819 74 |
| " mail | 9,400 00 | | |
| " rents | 215 00 | | |
| Total gross earnings | $559,127 68 | Gain | $107,904 32 |
| Expense of operating and maintenance | 312,406 28 | Increase | 93,868 15 |
| Net earnings | $246,720 40 | Gain | $14,036 17 |
| Amounts paid for rebuilding burnt bridges, interest and taxes | $137,052 32 | | |
| Leaving a surplus of | $109,668 18 | | |

Of this sum $44,689 52 has been expended on construction account, $47,408 85 is in cash on hand, and the balance is due the company on military and post-office account, and in increased materials on hand.

---

### New York Street Railroads.

From the New York Herald.

City railroad stocks are in demand for investment, and as a large number of persons are interested in them, we give the following statement of the earnings of three of their number for the last four months, and for the corresponding period in 1864, according to the returns made to the Internal Revenue Collector:

| 1864. | 2d Avenue. | 3d. Avenue. | 6th Avenue |
|---|---|---|---|
| July | $33,178 | $78,250 | $33,542 |
| August | 29,480 | 76,051 | 31,645 |
| September | 30,163 | 77,379 | 35,002 |
| October | 30,183 | 83,083 | 38,902 |
| Total | $123,009 | $314,763 | $139,091 |
| 1865. | | | |
| July | $39,480 | $98 822 | $38,456 |
| August | 39,396 | 94,622 | 37,498 |
| September | 37,592 | 93,567 | 43,398 |
| October | 36,170 | 94,600 | 44,425 |
| Total | $152,638 | $381,611 | $163,847 |
| Increase | 29,629 | 66,848 | 24,756 |
| | Or 24 per cent. | 21¼ per cent. | 18 per cent. |

It will be noticed that the business of each of these roads has materially improved of late, the largest per centage of increase being on the Second Avenue, this company having, during July and August, taken in more than the Sixth; the business of the latter, however, was heavier during the Exhibition of the American Institute, in September and October. The expenses of the lines have fallen off very largely, owing to the decline in prices of corn and hay. Last year corn sold at $1 95 per bushel, and hay at $32 to $35 per ton; now corn is selling at 93 to 96c per bushel, and hay at $12 to $14 per ton—making a difference to the smallest of these companies of not less than $75,000 to $80,000 per annum in the item of feed alone

### The Camels and the Central Pacific Railroad.

The California Farmer says: The Central Pacific Railroad Company have recently ended the opposition to their enterprize by *knocking the Camels off the track*, and thus extinguishing the whole "Jeff. Davis clique." It quotes from the Sacramento Union of Nov. 4 as follows:

"The locomotive *Atlantic*, while running to Colfax with a train of cars yesterday morning, encountered and ran over, or rather knocked from the track, a live camel, which was found in a deep cut a mile or two beyond Newcastle. Engineer Johnson, who runs the engine, is not, it appears, in the habit of looking out for camels at that particular point on the road, and his surprise on meeting this one was only equaled by that of the camel itself at seeing the locomotive. The train was running at its usual rate, when on turning a curve, the strange-looking object made its appearance. Johnson was at a loss at first to know what he had scared up, and for a moment thought that the "head devil," which the Chinese had destroyed by fire on I street, had made its appearance in another shape in a new locality. The only demonstration which the camel made as the engine approached was to stretch its head and neck some 10 or 20 feet higher than the position occupied when first seen. The engineer is not certain as to the exact extent of the elongation. He shut off steam as soon as possible, but not in time to save the camel, which was knocked *hors de combat* by the cow-catcher. Altough badly demoralized by the shock, it was found that no limbs were broken. The injured animal was removed to a more safe place than a railroad track, and it is believed that it may recover and profit by this unpleasant experience. Nobody in the neighborhood knew where the estray animal belonged or who owned it. When Jeff. Davis was Secretary of War under President Pierce, he opposed all propositions for the construction of the Pacific Railroad over the Central route as impracticable, but urged the establishment of a dromedary line through Arizona as eminently adapted to the wants of the nation and the requirements of the age. "Old Buck and the Dromedary Line" constituted the chorus of a Republican campaign song in 1856. Jeff succeeded in importing a large number of his favorites from Europe, and so long as he and his political friends retained control of the Government the dromedaries had a decided advantage over the Pacific Railroad. Since Fort Sumter was taken, however, a great change has occurred. The Pacific Railroad has the call and the locomotive the inside track. After having sold for $35 per head in greenbacks, Jeff's "pet lambs" have come to grief in various ways. Some of them figured on the Union race track a year or two ago in the great camel race with McLenegon as Master of Cermonies, and O. W. Dealing as the equestrian star. A year later *Cinderella* made a rather unsuccessful attempt at a ten mile trot, and still later one of the number was taken up for vagrancy in the lower part of the city and advertised as an estray. Never until yesterday, however, did the two rival lines come in direct collison. The result was decidedly favorable to steam and the Central route. The dromedary line gave way, and the engine resumed its course. Engineer Johnson, a few months ago, ran over Hansbrow's Newfoundland dog. Yesterday he vanquished a camel. He intends now to have a sharp lookout for an elepbant, and would not be much surprised to find a school of whales spouting along the line of the road."

### The Want of Railroads.

Our State is suffering for the want of Railroads to open up the rich and endless sources of wealth that lie buried throughout the whole length and breath of our land. It is gratifying, however, to see that the people are waking up to the matter of "Interual Improvements" of every kind.

We hear of a gigantic plan under the patronage of the California Steam Navigation Company, to unite all the Ferries on our Bay, and all the Railroads, including the San Jose, Oakland, Stockton, etc., and make a grand network, all under one organization—they of course to be the grand movers. We have no objection, provided the Legislature will have an eye to the *People's interests* at the same time.

SONOMA COUNTY RAILROAD.

We learn with real pleasure that the citizens of this flourishing county have acted nobly and wisely in subcribing for the stock to a Railroad, from Petaluma to Healdsburg. The stock is all owned and controlled by the citizens themselves. This is as it should be, and as this Journal has urged for several years. We rejoice at the result of their united action, now put the work ahead quickly and real estate will rise 25 per cent.—*California Farmer*

### Railroad Perplexities.

James M. Taylor, of Kentucky, conductor on one of the passenger trains of the Kentucky Central Railroad, was arrested at Lexington on the 6th, by order of the military authorities, and taken to Camp Nelson, on the charge of refusing to transport on his train, colored persons who were unprovided with passes from their masters. While martial law was in Kentucky, the railroad company transported all colored persons who had military passes, but since martial law has been revoked refuse, we believe, to carry them, unless they can prove that they are free, or are provided with passes from their owners. The Railroad Company is having a perplexing time of it. If it carries a slave without a special order from his or her owner, the latter sues for damages under the State laws; while on the other hand if it refuses to transport them the conductors are arrested by the military.

### The Mortgage Riot.

It will be remembered that the telegraph announced some days ago the tearing up of a considerable portion of the track and the burning of a bridge on the Milwaukee & La Crosse road by the farmers along the line. The provocation to this procceding was the matter of mortgages on their farms held by the company. It seems that these mortgages were given merely for the purpose of enabling the company to borrow money. The farmers, according to a verbal understanding, were never to pay anything, but were to share the profits of the road in return for loaning their credit. The inducement was made very tempting to the farmers, most of whom are Germans, and they generally went into it—so generally indeed, that these mortgages are said to call for about $2,000,000. In the meantime the road has been sold out to parties who neither knew, nor probably care for, any former verbal understanding. They hold the mortgages, and the farmers are attempting to force them to terms by these outrages. Of course the public sympathy is with the farmers, because the shrewd railroaders played upon their simplicity. Still the company has the law and the profits on their side, and it remains to be seen how the matter will turn out.

### Railroad Accidents — Cause and Remedy.

The New York Evening Post, in a long article upon the subject of railroad disasters, says:

On our railroads the ends of our rails are laid in clamps, technically called "chairs," which are bolted to the sleepers. The ends of the rails are joined, originally as closely as is convenient, or indeed possible by that method, due allowance being made for the expansion caused by heat. But the result is, when the road has been used awhile, that the ends are further separated, the concussion of the heavy wheels against the end of a rail drives it back; and it is not uncommon to see the ends of the rails half an inch, three-quarters of an inch, and sometimes even an inch apart. Now, suppose, what actually happens, that one of these ends is slightly raised above the level; when a locomotive or car wheel runs at the rate of twenty or thirty miles an hour against this end, the wheel receives a blow as from a sharp pointed hammer, a blow of immense force, which comes against a piece of cast iron, a brittle substance, very apt to break. Experienced railroad managers have assured us that at least two-thirds of the accidents on our roads are ascribable to this cause.

Now it is perfectly easy to save all this risk—or rather certainty—of disaster, and that by a method which is universally practiced in Europe, which has been thouroughly tested, and which would admit of a speed of fifty or sixty miles per hour, with more safety than we have now with have that speed. In Europe the ends of the rails are firmly united by what is called a fish-joint; this makes the whole length of the track a continuous rail, instead of the innumerable separate pieces which cause on our roads a constant jolting and jarring to the cars, and have the further and disastrous effect we have described. The joints are solidly made and holed; the rail is, as we have said, continuous; there is no jar, no blow against the wheels, no strain or concussion, such as gradually spreads and flattens the ends of half-worn rails with us; and the result is security against the chief cause of accidents on our roads.

SMOKE-CONSUMING FURNACE. — Mr. Samuel Godfrey, of Middlebro'-on-Tees, has recently patented some improvements in the construction of furnace bars and fire grates, well worthy the attention of all interested in smoke consumption. Mr. Godfrey states in his specification that his invention consists in constructing five bars movable or fixed, the fire surface of each of which is grooved, and forms a right line, or proximate right line, such fire bars having a number of wings, with the same right line and grooved surface, but otherwise each bar is of a curved form, with notches near the angles, made by the junctions of the right lines with the curved lines, for the purpose of gripping the clinkers and bringing the same through the bars. The wings, when the bars are in position in the grate, are interposed between one another, as is exemplified by the drawings accompanying the specification. Mr. Godfrey states: "By the use of my invention I obtain a larger area of air space than can be obtained by the bars hitherto used, and, consequently, effect more complete combustion of the fuel, preventing the accumulation of slag, clinker, or the fouling of the bars, as they can have rotative or rocking motion given thereto, thereby effecting a considerable saving in the consumption of fuel, and diminution of the labor of the fireman." Mr. Godfrey further states that for the side bars he should use rocking bars, with

wings augularly formed as regards the fire surface, so that one part may be part of the bottom of the grate, and the other part be part of the side of the grate, with curved lines connecting the two extremities of the angle lines. The bars can be placed either longitudinally or transversely in the furnace, and are applicable to reverberatory furnaces, as well as boiler furnaces, whether marine, stationary or locomotive. Moreover, the movable fire bars can be disposed vertically at the front, the back, and the side of the furnace or grate; or such bars may be fitted in any other convenient manner or position. Fixed side bars can be used similarly winged. In order to afford rotative or rocking motion to the bars, suitable gearing, shown by the drawings accompanying the specification, is used by Mr. Godfrey.—*London Mining Journal, Nov* 4.

THE COTTON CROP IN THE SOUTH.—The New Orleans *Picayune* estimates that the entire crop of the country this season, will be 1,250,000 bales. Opinions vary as to the amount of the old crop left in the South, the conjectures being from 700,000 to 1,000,000 bales. The Macon *Telegraph* is of opinion that we can depend upon white labor alone in rearing the great Southern staple. A large number of able-bodied negroes have gone North or enlisted in the army, and the majority of the freedmen left us cannot be relied on. The *Telegraph* estimates the next crop at a million of bales at the outside, and does not see how even this much can be made. It is yet hopeful, holding that with industry, prudence and economy, the white population, through its own exertion and a proper use of well disposed freedmen, will be enabled to realize more for its own support and profit also, than heretofore. This is a subject well worthy of careful and judicious consideration. We want facts from those who have had experience with *white labor*, which will serve to encourage many who are now in a state of hopeless despondency as to the future cotton crops of the South. — *Southern Cultivator, Athens, Ga.*

THE NEW I. & C. RAILROAD DEPOT.— This edifice is now completed and certainly is one of the finest railroad depots in the country. The east end is fitted up as a ticket office, ladies and gentlemen's parlor, saloon, wash-rooms, &c. The ticket office has all the latest inventions, most admirably adapted for the purpose. The ladies' parlor adjoins on the north side, the carpet is a fine and beautiful Brussels, while the furniture is the best of walnut; mirrors, chandeliers, &c., add greatly to the elegance of the room. The gentlemen's parlor is also very neatly and comfortably furnished. Attached are the wash-rooms, etc. The dining department is certainly the finest in the United States. The imposing display fronting to each parlor is very tempting; for the weary passenger can indulge in a hot or cold meal equal to any restaurant in the land, and then can go on his way rejoicing. The rooms, up stairs, except the middle one, which is to be a large dining hall, are being prepared in elegant style as offices for the Cincinnati & Marietta Company, who will commence running their cars into this depot, about the 1st of next month.

SPECIMENS of gold-bearing quartz from the Vermilion mines at Lake Superior are indicating a value of eighty dollars to the ton, so much richer are they than those first discovered and prononnced worth thirty dollars by the Government Assayer at New York.—*Stockholder.*

### Diving Extraordinary.

The following has been posted at Lloyds office (in London) in reference to the *Columbian* screw steamer, belonging to Liverpool, which unhappily foundered with all hands during the dreadful gales off the coast of France:—"On Thursday, the 31st August, the *Flambeau* sailed from Molenc, found the *Columbian*, and anchored over her. The ladder (which I had got made at the dock-yard) was lowered, with a pig of iron at each side of its end. The diver went down, stopping at each tenth step to signal that all was going on well. As he descended he found the pressure increasing to a most painful degree. When on the last step he found the ladder was too short, the wreck being 10 feet or 12 feet deeper than the pilots had reported) they had stated its depth to be twenty-nine fathoms, 174 English feet). The ladder was 60 meters, 197 feet long, from the top step to the lowermost one, from which the diver let himself down 10 feet or 12 feet below the pigs of iron. The electric lamp had been let down; but the pressure was so great that, although made of strong copper, with strengthening bars inside, it was bruised quite flat. The diver could distinguish the steps of the ladder, and even the fine line holding the lamp. He walked forward about twenty steps, sinking ankle deep in sand, and was then suddenly seized with a dizziness, and nearly fainted. He made his way back to the ladder, and made the signal to be hauled up. It was not perceived on board, but the people on deck feeling uneasy at having no signal, hauled him up rapidly. The forcing pump not being sufficiently strong the air could not be sent down regularly, and the air tubes had burst. The pressure at bottom was so great that none but such a man as this diver, who is built like a Hercules, could have withstood it. The scaphandre was torn and bruised; the under garment of strong caoutchouc cloth was rent in several places, and its seams were imprinted in the diver's flesh. The pressure on his belly was so intense as to force out his water against his will. After three-quarters of an hour's rest, and the forcing pumps and air tubes being repaired, the diver went down again. He had not walked more than a few steps from the ladder when the same accident recurred. In getting back to the ladder his arm got entangled in one of the ropes attached to him. He unscrewed his dagger knife from his side, cut the rope, and was shot up with great velocity, being buoyed up by the air contained in the scaphandre. His helmet struck, with a stunning blow, against the hull of the *Flambeau*, close to her keel. He had still strength enough to push himself away from the keel, and was floated to the surface, on reaching which he began to sink. Fortunately a boat was at hand, and he was picked up, brought on deck, and was taken out of the scaphandre apparently dead. It was more than half an hour before he came to, after continued frictions of camphorated brandy and ether. He then slept soundly for an hour, and on awaking wanted to re-descend, but neither M. Werdermann, M. Carvallo, nor the lieutenant would allow him. I asked M. Carvallo what were his conclusions after this trial? His answer was to the following effect:—'I am certain that at a depth of 40 meters (131 feet), all salvage may be carried on without any danger. Even at 50 meters (164 feet) it may be done if proper precautions are taken; but beyond that depth the danger is too great.' I have therefore made up my mind. My company abandons the salvage of the *Columbian*, and I shall leave this for Paris to-morrow morning. M. Werdermann and the diver called on me separately yesterday evening. Both are still of opinion that the salvage is possible, but with better apparatus and more effective means; all of M. Cabirol's scaphandres and apparatus (which were those used) having been by far too weak. With powerful means, which they themselves would superintend the making of, they would not hesitate to dive to the *Columbian*, and feel certain of success."

### Congress and Internal Improvements.

The following bills have been introduced. We are glad to see these subjects eliciting the attention of Congress so early in the session

SENATE.—Dec. 4.

Mr. BROWN, of Missouri, gave notice of a bill to authorize the construction of a bridge across the Mississippi river at St. Louis.

SENATE—Dec. 6.

Mr. SHERMAN introduced a bill for the survey and sale of the mineral lands of the United States, which was ordered to be printed.

The bill leaves the price blank, but provides that actual residents and occupants shall be allowed to purchase the lands at the minimum rate. (We shall publish this bill in full next week.)

SENATE—Dec. 11.

Mr. GRIMES, of Iowa, introduced a bill to grant an extension of time for the completion of certain Iowa railroads.

Mr. BROWN, of Mo., presented a bill to grant land for aiding in the construction of a railroad to the Pacific coast, through Arkansas and Missouri, by the Southern route. Referred to the Committee on the Pacific Railroad, and ordered to be printed.

HOUSE — Dec. 11.

On motion of Mr. WILSON, of Iowa, it was *Resolved*, That that the Committee on Commerce be instructed to inquire what legislation, if any, is necessary for the safety and protection of persons traveling upon railroads in the United States, and to report by bill or otherwise.

RAILROAD WAR.—The *Erie Dispatch* of the 25th ult., has the following item:

The Buffalo & Erie Railroad Company yesterday commenced laying down an additional siding near McSparren's mill, and located it on a portion of Mr. McSparren's property. He ordered carpenters to work, who commenced the erection of a building on the same ground. For a time the race between the track layers and carpenters was lively, and at last accounts the track layers were ahead. How the contest ended we did not learn. We suppose the dispute will be settled to-day.

LET IT BE ADOPTED.—Hunt's Merchant's' Magazine suggests the adoption of a plan for feeding passengers, such as prevails in France. At Vesoui, a station where trains do not stop long, travelers are informed by advertisements that if they desire breakfast or dinner, hot meals will be found in baskets at the buffet. The meals are composed of three dishes, half a bottle of wine, bread and dessert. The passengers leave the empty basket and dishes half an hour later at the next station, and pay what is about equal to fifty cents in American currency for their leisurely and comfortable repast.

ON THE INTERNAL HEAT OF THE EARTH AS A SOURCE OF MOTIVE POWER.—Mr. Geo Greaves, M. R. C. S., read a paper on this subject at the Machester (England) Literary and Philosophical Society, of which the following is an abstract: It has been very generally admitted that coal will not cease to be furnished because of the exhaustion of the stores of the mineral now existing in the coal measures; and, further, that the obstacles to the continued working of the mines will not be engineering difficulties. The increased depth from which the coal will have to be brought may add to the cost, but at that increased cost it will still be for a long time obtainable. The author considered the real insurmountable obstacle to be the high temperature of the lower portions of the carboniferous strata. That temperature had been shown to be at a depth of 4,000 feet. at least 120° Fahr., a degree of heat in which human beings can not exist for any length of time, much less use any exertion. It has occurred to the author to inquire whether the very agency which will prevent the continued supply of fossil fuel might not be made the means of rendering that supply unnecessary—whether, in short, the internal heat of the earth might not, to some extent, be utilized One or two modes of doing this had presented themselves to his mind. One of these might, he conceived, be the direct production of steam power, by bringing a supply of water from the surface in contact with the heated strata by means of artesian borings or otherwise.

### Pittsburg & Connellsville Railroad.

ELECTION OF DIRECTORS.—The annual meeting of the stockholders of the Pittsburg & Connellsville Railroad, was held at the office of the company, on Fourth street, Pittsburgh, Monday, December 4. The following gentlemen were elected Directors for the ensuing year: Wm. Ogden Hughart, John Fleming, G. L. B. Fettermau, Wm. Baldwin, and Joseph Pennock, of Pittsburgh; Cyrus Myers, of Somerset; Benjamin Deford, John A. Thompson, John Hopkins, Joseph R. Marston and W. W. Taylor, of Baltimore.

The Board of Directors met immediately after the election, when the following officers were elected for the ensuing year: President, Wm. O. Hughart; Chief Engineer, Benjamin H. Latrobe; Secretary and Treasurer, John H. Page, Jr.

THE RAILROAD CONNECTIONS OF MEMPHIS.—Four important railroads radiate from this city. The Memphis & Little Rock Railroad has not been running since the war, and was never completed. It is owned chiefly by capitalists in New-York, who are taking steps to rebuild and extend the road. The Memphis & Ohio, and the Mississippi & Tennessee railroads are in process of repair and in partial running order. They will be completed some time this winter, opening up to trade and communication extensive and rich districts which for years have been shut out from the world. The Memphis & Charleston Railroad is in operation to Tuscumbia, Ala., a distance of one hundred and forty-five miles, leaving a gap of twenty-one miles, which is crossed by hacks carrying passengers and making regular connections. These, however, will soon give place to the railroad, which is rapidly advancing to completion, when the great tide of travel will again sweep over this thoroughfare.

## RAILROAD ITEMS.

CHANGE OF TIME.—On and after Monday, December 3d, the Night Express on the Little Miami Road will leave at 11:40 instead of 10 P. M. Changes on the Marietta & Cincinnati Road will also be made as follows,—the night express will leave at 10 instead of 9:30 P. M., and the mail at 8.45 instead of 5 A. M.

The Newark, N J., Advertiser says that from the mass of testimony at the inquest into the late accident on the New Jersey Central, it appears that the disaster was the result of too much anxiety on the part of the conductor of the coal train. It says also that "the extraordinary combination of circumstances which led to the terrible disaster, place it beyond the note of common accidents. The heavy grade of the road at that point, the rapidly accumulating trains at White House Station, and the derangement of the whole time-table by the breaking loose of the rear car of the freight train going up, made a collision inevitable.

The Adirondac Company have opened the first 25 miles of their railroad from Saratoga north toward John Brown's Tract, and trains are now running regularly. They expect to go on extending the road as fast as they can, into the wilderness, until they ultimately reach Ogdensburg, thus opening to business an entirely new section of country. Quite a celebration was got up at Luzerne when the first train reached there. People were gathered from the surrounding country, and guns were fired and flags displayed.

Judge Milton Brown, President of the Mobile & Ohio Railroad, made a speech the other day before the Mobile Chamber of Commerce, in which he denounced citizens of Memphis, who owned the Memphis & Charleston Road, with having combined with the military and cotton thieves to defraud the Government. The Memphis Bulletin is very indignant at the charge, and dares the judge to attempt the proof of it. There is a severe conflict of interest between Memphis and Mobile in reference to railroad affairs; but it will probably result to the advantage of both cities in stimulating railway enterprise.

A robbery of a package of $1,250, was effected at Cedar Falls, Iowa, at the office of the Dubuque & Sioux City road. The agent had taken the package out of the safe, and in company with his clerk was watching it, as it hung up in a box near by, while the agent sold some tickets. Several employes of the company were in during the intervening time, and when the letters were to be put on board, the money package was gone. No clue to the thief.

Utica, New York, is astir in behalf of a railroad from that city to Cassville, thence by way of Waterville to Sherburne, and also from Cassville to Cooperstown and Colliersville. It is proposed that the city of Utica subscribe $500,000 to the work, and to build the road without borrowing money. This is to give her a direct route to New York City. It is to be called the Utica, Susquehanna & Chenango Valley Railroad, is to be 82 miles long and cost $2,500,000.

It is said that the entire length of the Louisville & Nashville Road is to be ballasted with broken stone, thereby rendering it free from dust.

The machine shops of the Albany and Susquehanna Railroad, we understand, are to be located at Colliersville, Otsego county. The grading of the road has been completed as far as Unadilla, Otsego county, and the track is now being laid between Oneonta and Otego, with a prospect of getting it down and in running order this season as far as Unadilla.

The Board of Directors of the consolidated Toledo, Peoria & Warsaw Railway company is as follows: Charles L. Frost, John Secor, James W. Smith, New York; John S. Brown, Portland, Maine; Wm. H. Cruger, Peoria; Henry Hill, E. P. Buell, Warsaw; G. W. Cherry, Carthage; H. B. Tenneych, Keokuk.

It has been decided by the N. Y. courts, that when a person attempts to cross a railway track he must look both ways to avoid danger If he does not, and is hurt, he can recover no damages unless it is clear that the car could have been stopped after the danger was apparent to the engineer or driver.

A citizen of Memphis has addressed to the Governor of Mississippi in behalf of a scheme for reducing the distance by river from Cairo to New Orleans from 1,300 to 900 miles. One part of the plan is to so dam up the Red river as to throw its waters into the Atchafalaya and Berwick's Bays.

The Pennsylvania Central and the Erie companies are to indorse the bonds of the Warren & Franklin Road for $1,300,000, and the construction from Irvine to Franklin, 53 miles, is let to Messrs. Edward Miller and Milton Courtright, and work has commenced.

The grading on the Western Pacific Railroad, California, has been suspended, it is said, in consequence of the work being far in advance of the reception of the iron. A contract has been made with eastern manufacturers for 8,000 tons. One locomotive and sixteen cars have been received.

It is now considered settled that $3,000,000 will soon be raised for a road from the Western Maryland Railroad via Hagerstown to Cumberland, thereby opening up another outlet from the Maryland coal region to Baltimore. It is said that this road is of great strategic importance.

The consolidation of the Toledo, Peoria & Warsaw railway, with the Mississippi & Wabash road, was consummated at Peoria, on the first inst. This gives Central Illinois a through route from the Mississippi river to the Indiana State line. It is supposed the entire line will be completed in eighteen months.

A route has been surveyed for a road in Pa., called the Perkiomen railroad, of 40 miles in extent from a point on the Reading road near Powlings' bridge, and connecting with the Reading & Pottsville, opening a direct line from that point to Philadelphia.

It is suggested that one reason why so many frightful steam boiler explosions have recently occurred is because the war drew off many skillful engineers, few of whom were disposed to return to their old employment after the war.

It is stated that the report of the Parliamentary Commission on Railways will be adverse to the transfer of railway management to the Government.

It is reported that the hands on the Pana & Springfield, Ill., road are on a strike, asking an advance from $1 75 to $2 00 per day, and the teamsters demand $4 00, having hitherto received $3 50. They also demand a reduction of time to nine hours per day.

At a meeting of the Atlantic & Great Western Railway stockholders, Sir Morton Peto and Mr. Forbes made elaborate statements and reports upon the condition and prospects of the lines, which they represented as most encouraging.

The Louisville & Nashville Road is rapidly fitting up in good style, and its friends predict for it an early place among the best roads of the country.

On the 22d ult., a train of 500 soldiers was thrown off the track near the Brazos bridge, Texas, and six soldiers were injured. The accident occurred by reason of a misplaced switch.

The St. Louis elevator has a capacity of 1,200,000 bushels of grain, and became one-third full within six weeks after its opening for use. A 200 horse power engine drives its machinery.

A correspondent of the Boston Post, thinks it is greatly for the interest of that city to favor the New Orleans route of shipment from the Northwest, even if the rates should be no lower than by rail.

A road is being agitated to start from Westfield, N. Y., and dip into the oil region, by connecting with the road from Titusville to Pithole, terminating at the State line, thirty miles from Westfield.

The Florida roads not having been much damaged by the war, and business being sufficient to make it an object, trains are run three times a week on the Pensacola road and once a week on the Central.

A new road is in contemplation to start from Athens, Ohio, via McConnelsville and Cambridge, to Carrolton and thence to New Lisbon, Ohio.

The first 25 miles of the Jackson, Lansing & Saginaw road, Mich., from Jackson to Macon are completed, and the cars commenced running regularly on last Monday.

The time for freighting between St. Louis & Boston, by river and ocean, is eighteen days.

The Chicago papers are groaning more and more at the diversion of traffic down the old river.

Principal offices of the A. & G. W. road have been established at Kent, O., Meadville, Pa., and at Jamestown, N. Y.

The recent raid of the farm mortgagers, on the La Crosse road, has compelled a suspension of the night train.

THE UNION PACIFIC RAILROAD.—T. C. Durand, Vice-President and General Manager of the Union Pacific Railroad, is in Washington making arrangements for the examination and acceptance by the Government Commissioners of the first forty miles of the main line west of Omaha. Since the decision of the President approving the amended location of the line, the work has progressed very rapidly.

### Railroad Accidents for the Week.

A large rock weighing 100,000 pounds fell into the tunnel at Tunnel Hill, on the Nashville & Decatur Railroad, the other night, breaking the rails and delaying the passage of the trains for twenty-four hours.

An unknown man was horribly crushed to death by a freight train, at the Philadelphia depot, last Tuesday night. No one to blame.

In getting a new locomotive for the A. & G. W. road from the Jersey City Works, over a temporary track, it was fired up, and the valve being accidentally turned the wrong way, it plunged ahead instead of backward, crushed through the vault of an immense brick building and smashed through the cellar wall, when it stopped. Great consternation prevailed among the many families in the building, till it was discovered that they were more scared than hurt.

Engineer Barrett, who took the passenger train out of Toledo, Monday morning, was killed near Belmore. A tree had fallen the night before, a limb of which protruded over the track, which raked the passing train, tearing out the side of the cab, and carrying the engineer back over the tender, crushing him to death against the baggage car. Deceased resided at Lima, and leaves a wife and five children.

A broken rail threw several freight cars from the track of the New York Central last Thursday—no one hurt.

An axle broke on the Niagara Falls branch of the New York Central last Friday, and two freight cars were precipitated down an embankment, throwing great quantities of butter, eggs, &c., into great confusion.

Seven cars were thrown from the track of the Missouri Pacific road the other day by running over two steers.

Mr. Samuel Gillett, was killed on the Erie road last Wednesday, and it is supposed he had chosen that mode of committing suicide.

An express train run off the track of the Hudson River road, last Friday, in consequence of the negligence of a switch-tender, smashing the engine, tender and baggage car. No one hurt. The switchman "didn't think it was time for the train yet."

A passenger train on the Louisville & Nashville road, was run into last Friday night by a freight train following it. The passenger train conductor, on being delayed twenty minutes at a bridge, neglected to send back a signal. No one hurt.

### PERSONAL.

The Missouri Republican learns that Brigadier Gen. E. B. Brown has resigned his position in the army for the purpose of accepting the General Western Agency of the Little Miami, Xenia & Cincinnati, and Hamilton & Dayton Railroads for Missouri and Kansas. General Brown will have his headquarters in this city.

Gen. Morgan L. Smith has been appointed to a similar position by the same Railroad Companies for the Lower Mississippi and Texas districts. These Railroad Companies have manifested a commendable desire to establish in business the wounded and crippled defenders of our country, by selecting agents to represent their interest in the West from this class.

DETROIT, Dec. 4.—Several important changes have taken place among the railroad officials here. Mr. W. K. Muir has been appointed Assistant Superintendent of the Michigan Central Railroad, vice C. H. Hurd, resigned. James H. Muir is appointed Secretary of the Detroit & Milwaukee Railroad in room of Thomas Bell, who takes the general management. Mr. Hurd, whose failing health compels him to leave the railroad business, has been the recipient of the finest service of silver ever presented in this city.

The commissioners sent out to examine the opened sections of the Union Pacific road have returned, and it is reported that they were favorably struck with the admirable character of the country along the Missouri and Kansas rivers and its singular adaptation to this great national enterprise. The road is completed for sixty-four miles from its eastern terminus at Wyandotte at the mouth of the Kansas river, and to within three miles of Topeka. The distance from Washington to Topeka is 1,300 miles.

The Columbus Journal says that Henry Harcourt, engineer on the L. M., C. & X. railroad, was assailed at 1 o'clock Friday morning, on his way from the depot, by several men who evidently intended to rob him. By a flank movement up an alley Harcourt escaped without damage.

### MONETARY AND COMMERCIAL.

The money market offers no feature of interest. There seems to be a pretty general acquiescence in the policy enunciated by Secretary McCulloch, and a consequent caution against doubtful credits. That we shall be gradually and safely let down to a specie basis, is believed by all who have scanned his able report, and if any one gets hurt in the operation, let them blame their speculative stars, for they are warned.

The following, from the Cin. *Gazette* of the 14th, is to the point:

The feature in the stock market was the further advance in Government securities, which are now, very decidedly, in the upward scale. The afternoon quotations in New York, compared with those of yesterday, were:

| | Yest. | Tues. |
|---|---|---|
| 6s, of 1881 | 107⅝ | 107⅞ |
| 5-20s, old | 102⅛ | 103⅛ |
| 5 20s, new | 99¼ | 100¼ |
| 10-40s | 91⅝ | 91⅝ |
| 7-30s, 1st | 97⅜ | 97⅜ |
| 7-30s, 2d | 97¼ | 97⅜ |
| 7-30s, 3d | 97⅛ | 97⅜ |

The foreign news gave additional strength to the already rapidly growing confidence, and as prices go up the outside demand increases. The high prices of railway securities, the corruption believed to exist in the management of many of the corporations, the withdrawal of money from speculative enterprises, and the general distrust that prevails with regard to prices of commodities, all combine to direct idle capital to the national securities. There are still other considerations operating in New York. Those who oppose Mr. McCulloch's policy of contraction argue that the large amount of 7-30s soon to mature, renders it impossible for him to do anything.

It appears, however, that parties holding over one hundred millions of the 7-30s, have made, or are ready to make, a proposition to the Secretary of the Treasury to fund them in

5-20s at par. It is not probable that the proposition will be accepted, but it shows what little danger there is of embarrassment from the cause made to appear so formidable by those who oppose contraction. The market for securities is now playing right into the hands of Mr. McCulloch. Every fraction added to the premium on bonds lightens his task, and makes easy the work of contraction. And as he progresses in this direction, our credit will improve in Europe. We have no doubt the response from England to the Treasury report and the President's message will be favorable. When our prospects were much less favorable than they are now—when, in fact, serious doubts hung over the future, 5-20s sold at 71 in London. The last quotation from there was 64⅞. What is to prevent an advance to 71 again? Is there any good reason to suppose the bonds will not reach even a higher figure? If, then, we shall have a favorable response from abroad to our Executive documents, the mountains that are being raised in the way of a steady contraction will melt away.

There was an active demand in our market from dealers for bonds, and up to 3 o'clock the following rates were paid: 5-20s, old, 102½; do, new, 99¾; 7-30s, 97¼, 97 and 96⅞. After the latest New York reports, 103 would have been paid for old 5-20s; 100@100¼ for new; 97½, 97¼ and 97⅛ for 7-30s. Dealers held 7-30s at 98 and 97½. Orders on Washington were bought at 97⅞@97½.

Gold was firmer, closing at 144½@144¾ buying, and 145½ selling.

The following were the closing quotations for exchange and coin.:

| | Buying. | Selling. |
|---|---|---|
| New York | par@50c | 1-10 prem |
| Philadelphia | par@50c | 1-10 prem. |
| Boston | par@50c | 1-10 prem. |
| Gold | 144½@144¾ | 145⅝ |
| Silver | 136@138 | 139@140 |

Railway securities were steady, but not materially higher. Quotations compare as follows:

| | Tues A. M. | Wed. P. M. |
|---|---|---|
| U. S. 6 per cent. Bonds, 1881 | 107⅝ | 107¼ |
| " 5-20 " old | 102½ | 103¼ |
| " 5-20 " 1864 | 99⅝ | 100¼ |
| " 5-20 " 1865 | 99⅝ | 100¼ |
| " 10-40 " | 91⅞ | 91⅞ |
| " One-year Certificates | 97⅝ | 97⅝ |
| 7-30s, 1st series | 97⅜ | 97⅜ |
| 7-30s, 2d series | 9 ⅞ | 97⅜ |
| 7-30s, 3d series | 97¼ | 97⅜ |
| New York Central | 96⅞ | 97⅛ |
| Erie | 92⅝ | 93¼ |
| Hudson River | 108⅜ | 109¼ |
| Reading | 115⅜ | 115⅞ |
| Michigan Central | 116½ | 116½ |
| Michigan Southern | 74¾ | 75¼ |
| Illinois Central | 133 | 133 |
| Cleveland & Pittsburg | 93⅜ | 93⅞ |
| Chicago & Northwestern | 35½ | 35⅞ |
| " " pref | 62⅜ | 62½ |
| Cleveland & Toledo | 104½ | 105⅜ |
| Rock Island | 106½ | 107⅛ |
| Pitts., Ft. Wayne & Chicago | 105⅝ | 105½ |
| Ohio & Mississippi Certificates | 27⅝ | 28 |

A telegram from San Francisco dated the 6th, quotes Stocks as follows: Gould & Curry, $950 per foot; Savage, $785 per foot; Chollar-Potosi, $195 per foot; Ophir, $350 per foot; Hale & Norcross, $175 per foot; Crown Point, $675 per foot; Yellow Jacket, $495 per foot; Belcher, $285 per foot; Alpha, $650 per foot; Imperial (per share), $105; California Steam Navigation Co., 62 per cent.; California State Telegraph Co., 29 per cent.

"A stockholder" denies that the Chicago, Burlington & Quincy R. R. Co. have declared a dividend of 20 per cent. in stock, in addition to the semi-annual 5 per cent. October dividend, and says that the 20 per cent. was the result of the operations of eight years past, instead of the high rates of tariff now charged.

## Railroad Earnings.

Last Week in November—

| | 1865. | 1864 | Increase. |
|---|---|---|---|
| Racine & Miss. (30th) | $18,313 | $14 840 | $3,473 |

First Week in December—

| | 1865. | 1864. | Increase. |
|---|---|---|---|
| Gt. West'n, of Canada (1st) | $71,629 | $60,1?8 | $11,440 |

For the month of November—

| | 1865. | 1864. | Increase. |
|---|---|---|---|
| Atl. & Gt. Western | $731,270 | $381,810 | $349,460 |
| Illinois Central | 624,968 | 657,141 | *32,173 |
| Michigan Southern | 498 421 | 444,522 | 53 899 |
| Michigan Central | 447,660 | 405,509 | 42,150 |
| Rock Island | 261,141 | 319,815 | *58,674 |
| North Western | 749,191 | 716,368 | 32,813 |

* Decrease.

The earnings of the latter part of November show a decrease, and for some months no better reports can be expected.

Receipts of Racine & Mississippi R.R. from Jan. 1, to Nov. 30, 1865.

1865....$651,352 82 | 1864....$540,883 27 | Inc. $110,669 55

The entire receipts of the Jeffersonville Road from May 1st to October 31st, were $628,790 72. The largest return was made for July, $144,350, and the smallest in October, $74,165.

The estimated earnings of the Cleveland and Toledo Railroad for eight days, ending Nov. 30, were:

| | |
|---|---|
| 1865 | 69,146 |
| 1864 | $60,253 |
| Increase | $8,893 |
| Total month this year | $231 500 |
| Total month last year | 184,594 |
| Increase | $46,906 |

MARIETTA & CINCINNATI RAILROAD CO. — Statement of approximate earnings for the fourth week Nov. 1865:

| | 1865. | 1864. |
|---|---|---|
| Passengers | 11,365 75 | 12,631 61 |
| Freight | 23,928 45 | 19,853 41 |
| Mail, Express and Telegraph | 1,981 75 | 1,084 48 |
| Total | 36 575 75 | 97,047 10 |
| Total this month to date | 114,511 86 | 97,047 10 |
| Total for the fiscal year commencing 1st of Jan | 1.117,431 43 | 933,363 70 |

The Erie Railway received (gross) in November, 1865, $1,906,000. The net earnings of November, 1864, were $1,224,909.

The shipments of Pittston Coal to December 2 were:

| | |
|---|---|
| 1865 | 534,905 16 |
| 1864 | 735,290 04 |
| Decrease | 200.384 8-20 |

It is stated that "a large number of the mortgage bonds of the Kansas branch of the Union Pacific Railroad have been presented at the Treasury Department, the parties holding them claiming an exchange of the Government bonds under the act of 1864. As Government bonds have been recently issued to this Company upon the affidavit of John D. Perry, President, his friends fear some trouble may result from his misapprehension of the facts when he made the affidavit. The Treasury Department will be exonerated from all blame in the matter if no notice of the existence of these bonds had been presented to the Department, the act of Congress making it obligatory to deliver the bonds upon the evidence furnished. The effect will probably be to prevent any further issue of bonds to that Company until the matter is investigated."

The Pittsburg, Fort Wayne & Chicago Road has made a contract for 25 new engines to cost say $500,000. The Company has, during the year, made large expenditures for construction, and has sold stock, it is stated, to the extent of $1,250,000.

# RAILROAD OFFICES AND AGENTS

**Atlantic & Great Western Railway**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord, General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A. B. Waters, Freight and Ticket Agent, Cor. Third and Walnut

**Ohio & Mississippi**

W. E. Bruce, Freight and Ticket Agent, Gazette Building, 82 West Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J. R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg Contracting Agent, Vine St. under Burnett House.
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 61 W. Third St.
Sydney Rice, Contracting Agent, " "

**Central Ohio & Pittsburg. Columbus and Cincinnat**

James E Shields, General Agent, No 77 W. Third St

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A. J. Day, S. W Passenger Agent, No. 4 Merchs Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J. W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burnet House.

**New York Central.**

G. B Gibson, S. W. Passenger Agent. W. H. Page Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Pittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent, No. 3 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.

Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

## Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M, |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt

---

## BENJ. H. LATROBE AND C. H. LATROBE,

CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.

**Through to Pittsburg without Change.**

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

---

Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:?0 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:00 A. M. | 10:40 P. M. |
| HAMILTON..... | 9:57 " | 11:43 " |
| DAYTON..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P, M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

**Ample time is allowed, at all hours, for meals.**

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast cornor of Broadway and Front streets, and at No. 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, } Passenger Agents.
CHAS. COOK, }

---

## CENTRAL RAILROAD

—OF—

NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton, Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

---

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twedty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 5:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.90; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex. 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

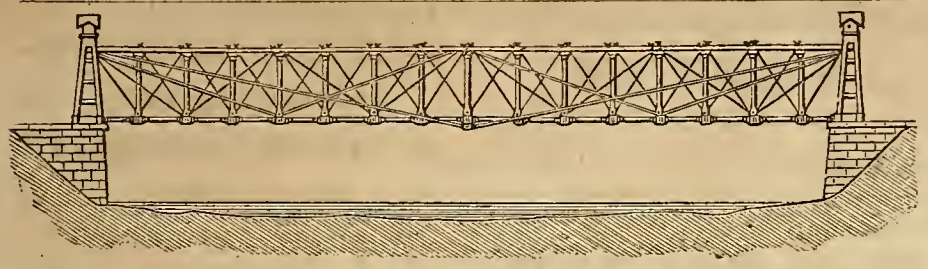
JAMES H. HOYT, Superintendent.

---

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



(*Plan of Bridge.*)

## FINK'S PATENT

## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1302.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

## SCREW BOLTS,

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

## LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or not the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

## KNOX & SHAIN,

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE.**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

## FINDINGS,

AND

## MACHINERY,

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

## BUSH & LOBDELL,

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

## Chilled Wheels and Tyres

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

## AMERICAN BANK NOTE COMPANY.

***Bank Note Engravers & Printers.***

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

## SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

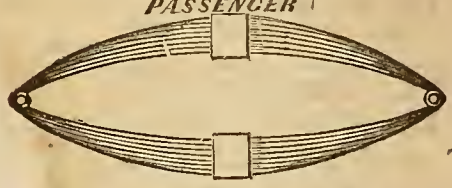
## RAILWAY SPRINGS.

**FREIGHT**





*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,
54 Exchange Place, New York.

---

## W. M. F. HEWSON,

STOCK BROKER,

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collections.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new unning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

**SPEED, SECURITY AND COMFORT,**

Will he more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINOTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimore*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Anent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P M. |
| Mail and Express | 9 40 A M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Ssturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

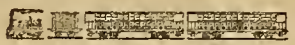
Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. O. E FOLLETT, General Ticket Agent.

W. D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND OINCINNATI SHORT-LINE



**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago In advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for ticketsvia Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

## CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

## FREEDOM IRON COMPANY.

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9.

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TH—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches nutside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅛ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

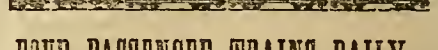
**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, THOS. T. TASKER, JR., HY. G. MORRIS. CHAS. WHEELER S. P. M. TASKER

## Philadelphia, Wilm'gton & Baltimore RAILROAD!



## FOUR PASSENGER TRAINS DAILY

**RAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimnre for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.54 P. M (Express.

On Snndays, 10.24 P. M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, DECEMBER 21, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum; in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

W. A. MUNSELL,
*General Agent.*


## Arrival and Departure of Trains.

| | *Depart.* | *Arrive.* |
|---|---|---|
| **LITTLE MIAMI.** | | |
| Cincinnati Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:00 P. M. | 4:00 A. M. |
| Morrow Accommodation | 5:30 P. M. | 8:00 A. M. |
| Night Express | 7:00 P. M. | 3:50 P. M. |
| Night Express | 10:00 P. M. | 9:40 A. M. |
| **MARIETTA AND CINCINNATI.** | | |
| Mail | 5:00 A. M. | 7:30 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P. M. | 5:45 A. M. |
| **CINCINNATI, HAMILTON AND DAYTON.** | | |
| Indianapolis & Cambridge City | 7:00 A. M. | 9:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:50 P. M. |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| Dayton Accommodation | 6:45 P. M. | 9:35 P. M. |
| Dayton, Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A. M. |
| Richmond & Chicago | 5:30 P. M. | 1:10 P. M. |
| **CHICAGO & GREAT EASTERN.** | | |
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " " | 5:30 P. M. | 1:20 P. M. |
| **INDIANAPOLIS AND CINCINNATI.** | | |
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Mail & Springfield Express | 2:00 P. M. | 4:30 P. M. |
| St Louis and Chicago Express | 7:30 P. M. | 1:10 A. M |
| Lawrenceburg and Harrison Accommodation | 4:30 P. M. | 8:30 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:20 P. M. |
| **CINCINNATI AND INDIANAPOLIS JUNCTION R. R.** | | |
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |
| **CINCINNATI AND ZANESVILLE.** | | |
| Mail | 9:00 A. M. | 4:35 P. M. |
| Caboosa Accommodation | 4:00 P. M. | 8:00 A. M. |
| **KENTUCKY CENTRAL.** | | |
| Express | 6:00 A. M. | 6:30 P. M |
| Accommodation | 1:50 P. M. | 11:00 A. M. |
| **ATLANTIC AND GREAT WESTERN RAILWAY.** | | |
| Morning Express | 9:40 A. M. | 6:30 P. M. |
| Night Express | 10:50 P. M. | 7:30 A. M. |

### Post-Office Department—Transportation of the Mails.

The operations of the Post-Office Department, both in Europe and America, is at this time, one of great interest. It illustrates in fact, the progress of Modern Civilization, in a direction the most conducive to the general welfare. *Forty years* ago, who carried the mail by Railroad? Sixty years ago who carried the mail by Steamboats? *Then* it took foor weeks to carry the mail from Cincinnati to New York; *now* thirty-two hours! In this progress of the social arts, it is very evident there are some great features of civilization wonderfully improved. It is evident, that the intercourse of business between distant places is carried on in an eighth part of the time, and that this is not only a great saving of time, but also of expense. The cost of carrying on business, which requires transportation, is so greatly less, that an immense amount of business can be transacted now, which could not under the old system, even when very beneficial to society. The effect on social intercourse is much greater. If we could imagine neither railroad or steamboat now, it is very evident not one-tenth part of either persons or letters would be carried, that are carried; but, we shall not say more on this topic; for, the power and increase of locomotion is one of the wonders of modern times. We have before us the report of Mr. Dennison, the Postmaster General, and it is one of great interest. The first fact which strikes us is, that for the first time, in many years, the Post-Office Department has paid for itself. From January 1, 1831, to June 30, 1865, the receipts and expenses of the Post-Office Department were in the aggregate:

| | |
|---|---|
| Receipts | $200,311,894 |
| Expenditures | 244,748,881 |
| Deficit | $44,436,987 |

The whole of this great deficit has occurred in the last fifteen years, and is mainly due to the sudden reduction of postage. Had the Government reduced the postage first to *ten*, and then successively to *five* and *three* cents, the receipts would have undoubtedly been sufficient to sustain the Department. The mode adopted was, however, most beneficial to the people; and if they chose to pay forty millions, as we did, in order to get cheap postage, they had an undoubted right to do it. It was a question only of expediency.

We are mainly concerned here with the manner and amount of Mail transportation. This is stated, by Mr. Dennison, in the aggregate thus:

The mail service in operation on 30th June, 1865, embraced 6,012 routes, of the aggregate length of 142,340 miles, costing $6,246,884, (exclusive of compensation to route and other agents, amounting to to $556,602 75.)

| | |
|---|---|
| Railroad, 23,401 miles, costing | $2,707,421 |
| Steamboat, 13,088 miles, costing | 359,598 |
| Celerity, &c., 106,851 miles, costing | 3,179,865 |

The aggregate miles of transportation were 57,993,494.

| | |
|---|---|
| Railroad | 24,087,568 |
| Steamboat | 2,444,696 |
| Celerity, &c | 31,461,430 |

The cost, per mile, for transportation by railroad was 11¼ cents; steamboat, 14⅜ cts; celerity, &c., 10 cents.

The increased length of routes was 3,168 miles; of transportation, 1,678,137 miles; and of cost, $428,415. For other details of the contract service see Appendix.

At the present time, one of the most interesting facts in the operations of the Post-Office Department, is the restoration of the Southern Mail Routes. During the Rebellion, one of the things undertaken by the Confederacy was a Confederacy Post-Office Department, at the head of which was Mr. Reagan of Texas. It seems to have been conducted with some success; but of course tumbled down, and Mr. Reagan himself went into prison.

One of the most difficult things Mr. Dennison had to do, was to restore the Post-Office routes of the South. This he has done with much ability, and a great saving of expense. It is one of the practical acts of "reconstruction," which are worth a great deal more than a theory.

The number of routes ordered into operation in States lately in rebellion is 241; their length 18 640¼ miles; and compensation $721,949; a reduction, compared with former cost of service in those States, of $881,109 per annum. This, however, results in part from reduced service, which, if increased to the standard of frequency previous to the war, on the present rates of pay, the cost would be—

For railroad service $550,053, instead of $989,365 per annum.

For "star" service $266,848, instead of $320,025 per annum.

For steamboat service, which having been increased, estimated at former number of trips, is $63,501, instead of $293,668 per annum, making the aggregate pay *pro rata* for all the service $880,402, instead of $1,603,058, per annum; showing an aggregate decrease *pro rata* of $722,056 per annum.

The saving is nearly one-half. This is in part due to a reformation in the manner of conducting the Post Office in the South. Under the old dispensation, everybody in the South thought it right to pluck "Uncle Sam," and many of the routes for mail service there were duplicated; that is, in two routes from A to C, and from A to D; a part from A to B, was common to both; the same party would take both contracts, and from A to B, get paid twice for the same thing. This has been all re-examined, and each route put on its own merits, without duplication or favor. This has produced the very favorable result cited above.

The mail overland routes to the Pacific and the mountains, are of course expensive; but, there is a necessity for them, and we think the time is not distant, when railroads will supersede the very expensive modes of trans-

portation now in use. Of the railroad routes, Mr. Dennison says:

Until September 15, 1864, the service on the Lincoln and Portland route was performed by the California Stage Company, at the rate of $90,000 per annum. Under proposals for continning the service until 1866 and 1868 the only bidder was the same company, at $250,000 per annum, which, heing regarded as excessive, was accepted only to June 30, 1865, for the purpose of again invitiug com petition. This was done by advertisement, dated Octoher 12, 1864, under which the California Stage Company was again the only hidder, at $300,000 per annum, which was declined. The service was, however, offered to the contractor for another year at the compensation of $200,000 per annum, which was refused. Arrangements were then made with responsihle parties to convey the mail at $225,000 per annum to June 30, 1866; after which it is hoped the service will be performed at more reasonable rates.

The overland mail service from the Missouri river to California is performed under two contracts, one from Atchison to Salt Lake City, and the other from the latter place to Folsom City. On the western division the service has heen performed with reasonable regularity, while on the eastern portion it has heen more or less irregular. owing, as alleged by the contractors, to high water, had roads, and hostilities of the Indians, disappointing the expectations of the department as to the value of the service.

The Post-Office Department is obliged to bear the burden of an immense expense on the overland routes, which while they are essential to the people and the government, are really not chargeable to the Post-Office. Of this, he gives the following illustration, viz.:

The following table illustrates the misapplication of the postal fund:

| | | | |
|---|---|---|---|
| Salt Lake City to Folsom.....$365,000 00 | $23,934 44 | $726,065 56 | |
| Atchison to Salt Lake, 365,000 00 | | | |
| Kanaas City to Santa Fe..... 35,743 00 | 6,536 57 | 29,206 43 | |
| Lincoln to Portland ... 225,000 00 | 24,791 67 | 200,208 33 | |
| The Dalles to Salt Lake, 186,000 00 | 5,660 77 | 180,339 23 | |
| Total.... ..... $1,196,743 00 | $60,923 45 | 1,135,819 55 | |

These are instructive facts, showing how largely the revennes of this department are drawn upon for general objects of administration not properly chargeahle to the postal fund. If to this be added the revenne which would accrue upon "free matter," charged with exisiing rates of postage, less the sum annually appropriated therefor, it is estimated that not less than two millions of dollars per annum are lost to the department, preventing an enlargement of mail accommodations to that extent in those States from which the postal revennes are mainly derived.

The whole Railroad transportation and cost is as follows:

Aggregate nnmber of miles..... 23,401
Cost..... $2,707,401

The Steamboat transport'n is.... 13,088 miles.
Cost..... $359,598

The estimated expenditures of the Department for 1866, are *eighteen millions*, apparently an enormous sum; bnt, which is made necessary by the extraordinary intercourse kept up in all parts of the United States, and the immense extent of the country. As we have seen, more than a million of dollars are expended on the lines west to the Pacific, beyond the receipts from postage on those lines; and yet we can not do without the lines to the West. So, before the war, the expenses of the Post-Office in the Southern States were greatly beyond the receipts. This is partly, hecause the population is not so dense; and partly because of the really fraudulent contracts in those States. It is more than probahle, that the Post-Office in the South will not for some years be self-sustaining; but, the measures taken by Mr. Dennison will reduce the expenses, and the social revolution going on will in a short time increase the receipts. In regard to the overland transportation, we think the time is much nearer, than many believe, in which the Railroad system will be extended over the immense interior of our country; and the receipts of the Pacific exceed its expenses. That time will he one of another social revolution, when the great mountains and vales of the west will resound with the voices of Industry and Civilization.

### A New and Invaluable Railway Baggage Check.

Our attention has recently been directed to a newly invented baggage check, which, judging from its appearance, will eventually supersede all other baggage checks at this time in use. It is the invention of a son of Mr. G. F. Thomas, editor of Appletons' Railway Guide. The check which we have before us represents a route from the city of New York to La Crosse, Wisconsin, to wit: New York to Albany, via Hndson River Railroad, Albany to Detroit, via New York Central and Great Western Railroad, Detroit to Chicago, via Michigan Central Railroad and from Chicago to La Crosse, via Chicago & Milwaukee, and Milwaukee & St. Paul Railroad. Upon the arrival of the baggage, upon which the check is fonnd at La Crosse, the baggage man has merely to take the check from the La Crosse haggage, in one second of time reverse the destination of the check, and it again returns to New York, in company with another piece of baggage. The check, as an experienced railroad man remarked, is not payable to bearer, but payable to order, thus protecting, as much as possible, the railroad companies, the haggage agent and the traveler. The check before us is intended to take the place of twenty checks.

There is also a local check which represents one hundred stations, arranged upon the same principle as the above, the one check answering for every station on the line to and from the various points. This one check is intended to take the place of two or three hundred. It reqnires but five minutes of time for any person, of the most ordinary capacity, to become acquainted with the manner of changing them for their point of destination, and, by attention, four or five pieces of baggage can be checked in the same time it takes to check one piece by the old style of check.

The following, which we take from an exchange, will give some idea of the amonnt paid out by railroad companies for baggage checks. Had the checks, now before ns, which are about the size of a fifty cent piece, have hecn iu nse, there is not the least doubt bnt that one half, if not two-thirds, of the amonnt would have been saved:

"The immense aggregate of lnggage carried on the New York Contral, may he inferred from the fact that no less than $220,000 checks are in use on that line; these cost eighteen cents a piece, making the trifling snm of $139,000 for this item alone. Thirty thonsand pieces of haggage are sometimes checked at Albany in a single month, while each seperate station has its corresponding supply, and embracing checks for every other station on the road. Every month a general distrihntion of checks is made, and a complete return of all stray checks to the head office in this city is effected."

### Cincinnati Chamber of Commerce.

This association held its quarterly meeting on the 13th inst. The attendance was larger than usual.

The Treasurer's report showed that the receipts for the quarter amount to $2,859.40, and the expenditnrers $3,658.40, being $799 in excess of the receipts.

The by-laws in relation to membership were amended. The fee for active members is $20, and firms $30. One honorary member only to be made each year. Non-resident members to pay $30 per annnm. Dues nnpaid after Jan. 1st, forfeit membership. Joint stock associations to be represented by their President and Secretary.

A committee were appointed on the subject of "dispatch" and "fast freight" lines.

The formal business of the meeting having heen disposed of, the President, Mr. Cook, read the following:

We have just passed the crisis of a terrihle ordeal. Our hnsiness with many sections of the country has to be re-established. The contest for pre-eminence in the West is to he renewed, and the glorious meed will be won by those who strive with the most liberal sagacity. The geographical position of our city —her wealth—her varied manufactnres, and all her surroundings of wealth, population and enterprise; should place her claims highest on the list; and it becomes hoth the duty and interest of her citizens, that they should fully recognize the importance of the moment.

"If we would secnre and maintain a metropolitan consideration throughout the West, it is indispensable that our means and energies he brought into practical uses with reference to that object.

"If we would attract commerce from all sections, and especially those naturally and geographically allied to us, we must bnild railroads, and establish steam-packet lines on our navigable nivers.

"If we would increase and multiply to an indefinite extent our manufactnres and popn-

lation, we must afford the facilities for the one, and build the houses for the other.

"If we would increase the usefulness and extend the influence of our Chamber of Commerce, we must provide for its occupancy and use a permanent place—a building whose proportions shall be commensurate with the modern idea of our city.

"If we would have our city known as the attractive resort of the stranger, we must at least provide hotels for his accommodation.

"Among many things which we at this time need to the carrying out of the suggestions made above, there are

"1. A railroad through Kentucky into East Tennessee, giving us direct communication with East Tennessee, South-western Virginia, and the Carolinas.

"2. Measures for the erection of a Merchants Exchange building, adapted to our wants.

"3. The organization of a company, or companies, for the construction of tenant houses, by which means suitable and healthful homes might be furnished, at reasonable rates, to that portion of our citizens who depend upon hired houses.

"4. The organization of a company for the construction of a hotel, adapted to the present wants of our city.

"5. The establishment of Saving Banks, in which might be collected, and, for the depositors, profitably used, the earnings of the poorer classes, whose small sums are not received at our banks.

"6. A Pawn Bank, where the poor, having nothing but personal effects to pledge as security for loans, might obtain small sums of money at reasonable rates of interest.

"These seem to be the most prominent practical wants of our city at this time. It is for our fellow-citizens to recognize or deny them. It will be a great gain, however, if our giving expression to them shall induce further reflection thereon. Satisfied as we are of their importance, we solicit mature and earnest consideration of each; such mature consideration as will determine the part every one shall take in aiding or obstructing the various measures.

"Each and all of them may be regarded with distrust or indifference. Yet we are persuaded that if they are entitled to the weight we are inclined to estimate them at, they will find active, earnest advocates in the community."

This paper was unanimously approved, and elicited the following motions:—the first in reference to a new Exchange Hall:

*Resolved*, That a committee of five be appointed to report measures and sites for the erection of a hall for the Chamber of Commerce, and be authorized to call a meeting of the Chamber to report to.

The second proposing the appointment of a committee whose duty it shall be to determine what action is best to be taken in reference to the construction of a railroad southward.

The meeting was an interesting one, and will have a great influence in regard to the important matters taken into consideration.

---

All vessels and trains of cars bound to the United States are now, in accordance with the law, duly inspected and sealed by American Consuls, resident on the north side of the St. Lawrence, and the Commissioner is of the opinion that this precaution will in a very great measure prevent smuggling operations on the Canadian frontier in the future.

### Congress and the Mineral Lands.

The RAILROAD RECORD has for many years advocated the survey and sale of the mineral lands of the United States, as an act of sound public policy, not only as regards filling up a vast and valuable territory with a permanent population, but more latterly, to assist, by the increased product of its mines in reducing the gold and silver values of the country to their normal condition. The last Congress had before it a bill to this effect, endorsed by the Secretary of the Treasury, but it was swamped in the hurry and bustle of the closing days. The bill we now print, has been introduced by Senator SHERMAN among the earliest business of Congress, and with the approval of those most familiar with the importance of the measure.

Some of the provisions are rather crude, but the general features of the bill are excellent, and we invite attention and criticism from those interested in the prosperity of the great mineral domain and the consequent increased wealth of the entire country.

We think the provision in Sec. 5, in regard to non-resident shareholders, is calculated to drive away capital. So also, there should be a tax of at least 5 per cent. on the products of non-purchasing miners, to equalize the burden imposed on the purchaser.

### A BILL

FOR THE SURVEY AND SALE OF THE MINERAL LANDS OF THE UNITED STATES.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That, from and after the passage of this act, the gold and silver lands of the United States and others, containing valuable minerals, the sale of which has not already been provided for by law, shall be subject to sale on the following terms and conditions, to wit: All such lands as are now known to contain, or which may hereafter be found to contain, such minerals, shall be sold at public auction, after six months public notice of the time and place of sale, to the highest bidder, subject to such minimum price per acre as may be fixed on said lands as hereinafter provided for. Said public notice to contain a full description of the location of said lands, the character and quality of the minerals, the nature of the deposits in which they are found, the general topographical features of the country, the means of access to the lands, and such other matters as may be deemed important by the officers having in charge the execution of this act.

SEC. 2. *And be it further enacted*, That the public sales of said lands, provided for in the foregoing section, shall not remain open longer than two weeks; and no sales of any of the lands embraced in such public notice shall be permitted at private entry during the continuance of such public sale. Should full, fair, and free competition be prevented at any of such public sales by combinations, the titles to all lands purchased by any person engaged in such combinations shall be utterly null and void, whether the patents for such lands shall have been issued or not; and whether the fact of such combinations shall have been discovered before or after the titles shall have issued for said lands. No person shall be permitted to bid at any such sales, or to purchase any such lands, except citizens of the United States, or those who shall have declared their intention to become such, and any such bid or purchase shall be absolutely null and void. No lands shall be offered at any such public sale except such as shall appear to the Commissioner of the General Land Office to be required by the wants of the community; and they shall be offered in separate lots, beginning at the lowest numbered lot and proceeding in regular numerical order, giving a reasonable time for bidding on each lot. All lands thus offered and remaining unsold at the close of any such public sale shall be subject to private entry at the minimum price fixed on such land.

SEC. 3. *And be it further enacted*, That it shall be the duty of the Surveyor General for the district in which any such lands are situated, to prepare plats of subdivisions of any of said mineral lands; said subdivisions to be made in accordance with the provisions of the act of fifth of April, eighteen hundred and thirty-two, that is to say: where it is found necessary to subdivide a quarter quarter section, such subdivisions shall be made by drawing lines from a point equidistant between the two corners of each boundary of such quarter quarter section to a point in the opposite boundary corresponding thereto; and where it is found necessary or expedient to subdivide any such quarter quarter section into smaller lots than ten acres each, each of such ten acre lots shall in like manner be subdivided into four equal parts, or still smaller, on the same principle, wherever it is deemed necessary; and fractional quarter sections, or fractional quarter quarter sections, shall in like manner be subdivided into lots of suitable size for mining. Said lots shall be numbered in the same manner that sections are numbered in townships.

SEC. 4. *And be it further enacted*, That for each land district there shall be appointed at least one geologist, who shall also be a good mineralogist, whose duty it shall be to make a thorough exploration of all the lands in such district, containing or supposed to contain gold, silver, or other valuable ores, whether such lands are being worked or not, and to make full report of the same, with the size of the subdivisions necessary and proper to enable each purchaser to work and mine the land properly, and giving full descriptions of the kind and character of such lands, and the mineral found in them; said report to be in triplicate, one to be sent to the General Land Office, one to the Surveyor General, and the third to the district land officers. The geologists shall be appointed in the same way as the district land officers, and shall receive ——— per annum for their services ——— dollars.

SEC. 5. *And be it further enacted*, That whenever a person has discovered or shall hereafter discover a mine, or lead, or deposit of mineral, and shall be actually mining or working the same, such person shall be, and is hereby, authorized to enter the lands so actually worked and mined by legal subdivisions at the minimum price of said lands. The purchase money for all said lands shall be paid in gold or silver. Proof of the actual mining or working of such lands shall be made to the satisfaction of the register and receiver and geologist for the district at least thirty days before the commencement of the

public sale. The proof of such mining or working shall be the affidavit of the party so mining or working, sustained by the affidavits of two respectable, disinterested witnesses; and any person swearing falsely in any such case shall suffer all the pains and penalties of perjury, and forfeit all right, title, and claim he or she may have acquired to any such lands. Where any such lands are worked or mined by a company that is incorporated, the pre-emption right shall be proven, the entry made, and the patent issued in the name of such corporation or its assignees; but where any such company shall not be incorporated, the pre emption right, entry, and patent shall be in the names of all the shareholders: *Provided, however*, That any such shareholder in either case, who is not a resident of the district, shall acquire, have, and hold no right to any such pre-emption entry or title: *And provided, further*, That where two or more persons or companies shall occupy and mine or work the parts of the same lot or subdivisions, such persons or companies shall enter such lot as tenants in common. the rights of each to cover the land mined or worked by him or her, and the portion of each of the lot so occupied shall be in proportion to the extent and value of their improvements or mines, and shall be so specified in the certificate and patent.

Sec. 6 *And be it further enacted*, That the register and receiver of the land district, in conjunction with the geologist. shall classify said lands with reference to their value respectively; the subdivisions that should be made of them to accommodate those who are actually working or mining them, or those who may thereafter desire to do so, and report to the Surveyor General and the General Land Office, giving the minimum price that should be fixed on each class of lands, the location and extent of each deposit, and of each settlement or mining operation, with full reasons for each conclusion. If the Surveyor General has any reason to doubt the correctness of such report, he shall state his doubts, and the reasons for them, to the General Land Office, and to the land officers and geologists, and the decision of the Commissioner of the General Land Office shall be as final as to the minimum prices of said lands, and the extent of the subdivisions. but in no case shall the minimum price of such lands be less than fifty dollars per acre. No person shall be permitted to purchase, at public or private sale. more than forty acres of any such mineral land; nor shall any person enter a second tract till he has shown to the satisfaction of the land officers and geologist that he has worked the mineral out of said lands, and that it will no longer pay the expense of working. He shall also, before being permitted to make a second entry, sell at public auction, to the highest bidder, for cash, the land embraced in his first entry, and which he proposes to abandon.

Sec. 7. *And be it further enacted*, That if any person who has purchased and owns any such lot or tract of mineral land shall die, without leaving heirs residing in the State or Territory where his land is situated, public notice of such death shall be given in a newspaper of greatest circulation in such State or Territory, at least once a week for six months, of the death of such person, and giving a description of the lands and other property left by such persons; and if no heir shall come forward to claim such property within two years after such notice is given, it shall be the duty of the court of probate for the county or district in which such lands and other property are situated to sell the same after sixty days public notice; and after paying all the debts of such person, and the expenses of these proceedings, the net proceeds of such sale shall be invested in United States bonds or stocks, for the benefit of such heirs; *Provided, however*, That if any such heir shall come forward and establish his or her heirship within the time limited by this section, and shall refuse to settle and become a citizen of the district in which such lands are situated, said lands shall be sold as herein provided; and the net proceeds, after paying all expenses, shall be paid over to such heir: *And provided, further*, That in all cases of sales under this act the deed shall be issued by the judge of probate, by authority of said court of probate, and reciting and referring to this section, and every such deed shall be taken and considered as conclusive evidence of title, and that all preliminary steps had been correctly taken.

Sec. 8. *And be it further enacted*, That, for the purpose of coining said gold and silver, the President of the United States shall be, and is hereby, authorized to lay off said mineral regions into suitable coining districts, having regard to the mints now established by law, and that all gold or silver mined or procured from any of the lands sold under this act, shall be coined at United States mints, the owners paying one per centum for coining gold, and three per centum for coining silver; and any person who shall remove or attempt to remove any gold or silver out of the coining district in which it was procured, without first having the same coined, shall forfeit said gold or silver—one-half of which shall go the informer and the other half to the United States; nor shall any cinnabar be exported without the consent of the chief of the mint for the district in which it was procured, under penalty of like forfeiture, to be disposed of as directed in forfeitures previously provided for.

Sec. 9. *And be it further enacted*, That before any person shall be permitted to enter any of said mineral lands he shall take the oath of loyalty to the United States prescribed by law, and any violation of said oath, and any malfeasance on the part of any of the officers whose appointments are authorized by this act shall be deemed a felony, and upon being proven before any court of competent jurisdiction the offender shall be punished by a fine of not less than one thousand dollars and imprisonment at hard labor for not less than one year, or both, at the discretion of the court; and in case of the officers, they shall forever be disqualified from holding office under the government of the United States.

Sec. 10. *And be it further enacted*, That the net proceeds of said lands shall be, and they are hereby, dedicated to the payment of the principal and interest of the bonds of the United States; and if Congress shall hereafter authorize the issue of bonds, principal and interest redeemable in gold, any such bonds shall be received in payment for any of these lands. And all the provisions of this act relative to lands shall be carried out under such rules and regulations as may be prescribed by the Secretary of the Interior for that purpose, and all relative to mints, coinage, and so forth, under such rules and regulations as may be prescribed by the Secretary of the Treasury for that purpose.

Sec. 11. *And be it further enacted*, That, upon the survey of the lands aforesaid, the Secretary of the Interior may designate and set apart such portions of the said lands as are clearly agricultural lands, which lands shall thereafter be subject to pre-emption, homestead entry and sale, as other public lands of the United States, and subject to all the laws and regulations applicable to the same.

Sec. 12. *And be it further enacted*, That, in extending the United States surveys over mineral regions, the Surveyor General shall be, and he is hereby authorized, whenever he shall find mining settlements, made in accordance with surveys executed by such settlers, to establish such surveys by lines, courses, corners, and so forth, correcting such lines and corners with the boundaries and corners of the sections of the rectangular surveys, and designate those lots by suitable numbers on the plats of survey, giving the reasons and facts in full for such anomalous surveys: *Provided, however*, That no such mining lot shall contain more than forty acres, nor shall more land be included in any such survey than the area being actually worked or mined by the settler: *And provided, also*, That the Surveyor General may cause adjacent lands to these mineral lots to be subdivided in the same manner with those lots, when the interest of the government or the convenience of settlers shall, in his opinion, require it.

Sec. 13. *And be it further enacted*, That all the lands containing salt deposits shall be subdivided by the Surveyor General into lots of one acre and a quarter each, in the mode herein prescribed for subdividing mineral lands; and he shall subdivide timber lands adjacent to such mineral lands into ten acre lots, the minimum price of such salt and timber lots to be determined by the Commissioner of the General Land Office, on the report of the Surveyor General, register and receiver, and geologist, as prescribed for mineral lands; and each person who shall buy a mineral lot shall be authorized to enter a salt and timber lot at the same time, at the minimum price fixed by the Commissioner as aforesaid: *Provided, however*, That if two or more persons at the same time apply to enter the same salt or timber lot, such lot shall be put up at auction among such applicants, and the highest bidder shall be entitled to enter such lot, paying therefor the amount bid, in addition to the price fixed by the Commissioner of the General Land Office, the whole of such payments to be paid in gold or silver.

Sec. 14. *And be it further enacted*, That when in his judgment it shall be necessary for the public interest, the President shall have the power, and is hereby authorized, to increase the number of land districts in any State or Territory, fix the boundaries of the same, appoint a register and receiver for each district so created, and to appoint such additional number of geologists in any land district as may be deemed necessary fully to carry out the purposes and intent of this act.

Sec. 15. *And be it further enacted*, That all laws or parts of laws inconsistent with the provisions of this act be, and the same are hereby, repealed.

---

Albany, December 13.

At an election held here to-day for directors of the New York Central Railroad, the following ticket was chosen: Dean Richmond, Richard M. Blatchford, John P. Chedell, Alonzo C. Paige, J. V. L Pruyn, Nathaniel Thayer, Livingston Sprakei, Cornelius L. Tracy, Chas. H. Russell, Henry H Martin, Jas. H. Barker, Horace F. Clark and Andrew D. White.

### Cincinnati Street Railroads.

The travel on our street railroads has been and is steadily increasing, and the receipts of the various companies are now much larger than they were in 1862. The expenses also have undoubtedly increased to some extent, but hardly in the same proportion with the receipts. For instance. in 1862 conductors and drivers each received $7 per week, they now receive $9. Horse feed is not as high now as it was in 1862–3, and the other expenses have only increased in about the same proportion as wages. The per centage on the gross receipts paid the Government under the Internal Revenue Law is 2½ per cent.

CINCINNATI STREET RAILROAD COMPANY.

| | 1862. | 1863. | 1864. | 1865. |
|---|---|---|---|---|
| Annual receipts..... | $16,573 | $70,647 | $94,389 | $95,744 |

CITY PASSENGER RAILROAD COMPANY.

| | 1862. | 1863. | 1864. | 1865. |
|---|---|---|---|---|
| Annual receipts ,.... | $14,602 | $74,803 | $98,191 | $103,245 |

PASSENGER RAILROAD COMPANY.

| | 1862. | 1863. | 1864. | 1865. |
|---|---|---|---|---|
| Annual receipts..... | $13,874 | $47,797 | $59,247 | $51,400 |

PENDLETON & FIFTH-ST. RAILROAD COMPANY.

| | 1862. | 1863. | 1864. | 1865. |
|---|---|---|---|---|
| Annual receipts..... | $7,967 | $31,947 | $74,243 | $79,901 |

The earnings of each of the roads from September 1st, 1862, to November 1st, 1865, were as follows :

| | Cin. Co. | City Pass. | Pass Co. | Pen. Co. |
|---|---|---|---|---|
| 1862.. ..... | $16,573 | $14,602 | $13,874 | $7,967 |
| 1863..... | 70,647 | 74,803 | 47,797 | 34,947 |
| 1864..... | 94,389 | 98,191 | 59,247 | 74,243 |
| 1865..... | 95,744 | 103,245 | 51,400 | 79,901 |
| | 277,353 | 290,841 | 172,318 | 117,058 |

It will thus be seen that the City Passenger Company has made the largest earnings, and the Pendleton Company the least. The above statements are from the books of Mr. Fosdick, the Assessor of the First Congressional District.

Gas Consumed.—During the year 1864 the number of cubic feet of gas consumed in Cincinnati was 188,687,813, and the amount of revenue tax paid by consumers thereon was $35,994.17.

In the year 1865, the amount consumed in nine months was 169,267,206 cubic feet, for which tax was paid of $46,854.45.

For the year 1863 the revenue tax paid amounted to $25,123.79, at the rate of fifteen cents per 1,000 cubic feet. The tax for 1864 was at the same rate until July, when it was raised to twenty-five cents per 1,000 cubic feet. Computed at fifteen cents, however, the total for that year would be $27,423.13, which shows an increase of over ten per cent in twelve months.

The aggregate amount now paid, per annum, for gas light in the city is $777,760.97. Of this sum $66,665.22 goes toward the payment of the war debt, according to the records of Mr. Pullan, Assessor of the Second District as returned by the Gas Company.

### A New Railroad in California.

San Francisco, December 6.

Articles of association have been filed by a company to build a railroad from San Francisco to a town in San Diego; thence eastward to State line, and thero to connect with the contemplated road to the Mississippi river. The capital is thirty millions; length of road 720 miles. The directors are T. G. Phelps, C. N. Fox, Benj. Flint, C. J. Hutchinson, B. G. Lathrop, J. B. Cox, and B. W. Hathaway, T. G. Phelps is President.

### New York Central Railroad.

The annual report, to September 30, 1865, of the New York Central Road, made to the general meeting of shareholders, at Albany, presents the following figures, in comparison with the previous annual report, to September 30, 1864 :

| | Sept. 30, 1865. | Sept. 30. '64. |
|---|---|---|
| Stock, beginning of year... .... | $24,386,000 | $24,209,000 |
| Added by conversion of bonds.... | 205,000 | 177,000 |
| Total capital..... | $24,591,000 | $24,386,000 |
| Funded debt..... | 14,627,442 | 13,211,341 |
| Total stock and debt..... | $39,218,442 | $37,597,341 |
| Undivided income..... | 3,921,297 | 3,854,867 |
| Total cost represented..... | $43,139,739 | $41,452,208 |
| Cost of construction and equip.. | 33,701,919 | 32,879,251 |
| Consolidation premiums..... | 6,768,119 | 6,995 597 |
| Lake and Lake Shore property... | 841,791 | 604,450 |
| Hudson Bridge property..... | 438,000 | 108,495 |
| Cash and Bills, surplus..... | *216,276 | *372,659 |
| Fuel and Material, operating..... | 2,173,633 | 1,491,756 |
| Total value of property ... | $41,139,739 | $42,452,208 |
| Less, Fund charged off..... | 1,000,000 | 1 000,000 |
| Total reckoned value..... | $43,139,739 | $41,152,208 |

| | Sept. 30, 1865. | Sept. 30, '64. |
|---|---|---|
| *Cash and bills on hand..... ... | $1,152,033 | $1,196,449 |
| Expenses and interest accrued.... | 935,757 | 823,790 |
| Surplus cash, &c..... | $216,276 | $372,659 |

EARNINGS AND EXPENSES.

| | 1864. | 1865. | Increase. |
|---|---|---|---|
| Earnings..... | $12,997,889 | $13,975,524 | $977,635 |
| Opera'ng expenses | 9,346,184 | 10,882,358 | 1,536,174 |
| Net income..... | $3,651,705 | $3,093,166 | |
| Decrease in net income..... | | | $558,539 |

| | 1864. | 1865. | Increase. |
|---|---|---|---|
| Operating Expenses ..... | $71.91 | 77.87 | 5.96 |
| Net earnings..... | 9.25 | 6.24 | 3.01 |

The amount of freight moved shows a large decrease in tons and stands as follows :

TONS MOVED.

1864. ...1,557,148 | 1865.....1,275,299 | Dec. ..281,849

or a decline of over 16 per cent.

The road during the year has increased its stock of supplies to "a popular standard," and has made the usual repairs on its track and rolling stock. Its construction account has been increased $822,668, including $659,300 for new engines and cars. To add these necessary engines, and to bring its stock of supplies up to the proper standard to pay dividends, two million of short bonds have been sold, and the cost of the property in the aggregate increased $1,621,000. The report is not encouraging to holders of railway property in any part of the country, but it is from no fault of the managers of the road. The high prices of labor and materials during the past two years has more than absorbed the increased earnings. The annual reports of the other New York roads will be looked for with renewed interest, but none of them will be any better for their shareholders than the Central, which has been obliged to make dividends upon borrowed money.

### "VIATRICIDE."

In one American year, railway accidents take place at the rate of ten in a month. During the past six months, the average was twelve; and for three or four months back the number of disasters much exceeded the general average. Twenty-seven or twenty-eight of these peculiar happenings were engineered through the month of September, which is not quite one for every State of the Union (with or without a railway system,) nor for every day of the month. In a previous month, the proportion was nearly the same.

To repeat that railroad disaster is alarmingly common would be superfluous. It seems to have run riot, and is like an epidemic. The crime of negligence in great cities is the fruitful breeder of cholera; the same crime, far less to be excused upon our railroads, is the prolific and apparently perseveriug author of the epidemic class of accidents. No such proportion of casualties, as compared with circumstances and means of safety, exists on the ocean as upon the land. The rate of boiler explosions and of so-called accidents, exclusive of disasters occasioned by phenomenal storms, is in fact less upon the sea, where danger appears, in every respect, greater than in our familiar inland travel by railway and steamboat. We are better assured, in trusting ourselves to the untamed barbarism of the ocean than to the civilization of steam. The business of our railroad managers is plainly marked out, and needs if anything, less science than that of the mariner with his instruments and chart. Good lines, sound bridges, are to be built, and experienced and faithful clerks, engineers, conductors, switch-tenders, inspectors, and presidents, are necessary. Nevertheless, we know of railroads in the neighborhood of the city the passage over which is a daily apprehension, either from notoriety of disaster or patent cheapness and insecurity of bridge-building. Still there appears to be a problem somewhere.

We infer that, with all the boast of American enterprise, railroad science is but little understood, or that, by its very expansion (we should rather call it contraction) into money-making, without limit and control, it has become as prodigal of neglect and death as it is illiberal with means to compass safety. The latter is the popular and public idea. We are tired of organized catastrophe—the wholesale rush of cars over the railroad dead line—the breakdown from Mohammed's hair-bridge. Let us not question the Koran if that bridge had its trestles and spiles. Public opinion demands even against the stupendous fatalism of our railway system, that something should be done to abolish the crime which, from the last few months' exasperations, has come to be called "railway murder." It would not be an unwise example for the railway interest of the country to convene and discuss measures of security, to give welcome to every suggestion of science, every invention designed to reform our hasty and heterogencous railroad system. One simple remedy for a frequent class of disaster is already well-known, namely: the unstinted application of the vast moneys daily derived from travel to the building of first-class bridges, lines and machinery. The fares collected from killed and wounded might obviate one class of dangers; the cost of damages by disaster might extinguish the whole. As American reform takes shape in conventions, a general railway meeting would not be out of place, if its presumed members would be willing to trust themselves to the cars. But reform is imperative; it appeals to morals and to science; and for want of another tribunal, must be carried to the highest coroner's jury of railway managers.

The Grand Trunk earned nearly a quarter of a million more in September and October of this year than during the same months last year, and the Great Western of Canada earned an excess of two hundred thousand dollars in the same time. All the Canadian roads earned an aggregate of two million three hundred and thirty-five thousand four hundred and forty-six dollars for these two months this year, against one million eight hundred and thirty thousand six hundred and ninety-six dollars for the same time last year — an increase of about twenty-eight per cent.

### Another Railroad Wanted.

The Oshkosh people are agitating the matter of a railroad from Dubuque, through Mineral Point, Portage and Ripton to Oshkosh, and thence incidentally to Green Bay by way of the Fox River towns. A vigorous writer, over the signature of R. R., has published several letters to the *Northwestern*, making strong arguments in favor of the ronte. We quote from one of them, having a local application.

To the towns and villages on the lower Fox River, between Lake Winnebago and Green Bay, dependent as they all are upon the use of their water power power in manufacturing, it is only necessary to provide a thorough-fare of commerce and travel to and from the agricultural regions of Southwesteru Wisconsin, and of Iowa and Minnesota, to secure their rapid increase in business and population. The main, we might say the only, reason that the unequaled water privileges of the lower Fox have not been sought for to a larger extent is that they are off of the common thoroughfare. It is customary to say that it is because capital is wanting. But capital would soon find its advantage in occupying such a water power, if it were on such a thoroughfare. Useful as the Fox River Improvement has been, it has not answered the expectations of its friends in this respect. We believe that the road to Dubuque would establish such a thoroughfare.

The interests of Green Bay are more largely concerned than those of any other place, in this enterprize. * * * Let them aid us in making a railroad thoroughfare to Mineral Point and Dubuque, and they will see warehouses springing up on the banks of their river, vessels of all descriptions loading and unloading at their wharves, the Fox River water power behind them occupied by flour, cotton, woolen and iron mills and manufactories; their streets filled with active and busy tradesman, and their importance as a first class lake port acknowledged by all the world. Railroad trains coming through from Duhuque would bring them the pork, corn and wheat of Iowa, the lead of Galena and Mineral Point, and the grain of Southwestern Wisconsin, — they would carry back the merchandize for that whole region of country, brought to Green Bay by the propellers and sail vessels from the lower lakes, which would come there after the produce brought by the road from the west. It would be the forerunner of other enterprizes, now existing only in imagination, but which would be quickly realized after the capacity for business of Green Bay had been make manifest.—*Menominee Herald.*

### Railway Affairs in Congress.

The railroad rivalry and warfare in Congress has fairly commenced. Several great enterprises, among them the New York and Washington Air Line, are to be pushed this session. It is said Mr. Sumner's bill, introduced on Wednesday in the Senate is understood as a blow at the New Jersey Railroad. It provides that every railroad company in the United States, whose road is operated by steam, its successors and assigns, be and are hereby authorized to carry upon and over its road, connections, boats, bridges and ferries, all freight, property, mails, passengers, troops and government supplies on their way from any State to another State, and to receive compensation therefor.

Cars are being built in New York for a street railway in Calcutta.

### The Sturgeon Bay Canal.

An effort will again he made during the approaching session of Congress, to obtain the passage of an act granting public lands to the State of Wisconsin for the construction of a ship canal across the portage between Lake Michigan and Sturgeon Bay.

The length of the proposed canal is only one and a half miles, while it would shorten the navigable distance between Milwaukee and Green Bay about two hundred miles, or one-fourth of the entire distance. It would, also, without any additional expense than the building of a suitable breakwater, create one of the most commodious and safe harbors on the west shore of the lake—a harbor which would prove of incalculable value to the navigable interest as a harbor of refuge from the destructive gales which are of frequent occurrence in that region. "Death's Door," which the new outlet would cut off would no longer be the terror of mariners or the literal *port du mort* along whose rock-bound threshold are annually strewn the wrecks of so many vessels. The number of vessels now entering Green Bay during the navigation season is about one hundred, which bring out no less than 150,000,000 feet of lumber, besides freights of other kinds, amounting to many thousand tons. This commerc is annally increasing, and with the development of the Lake Superior region under the influence of railways that ere long will lay down its mineral products at Green Bay, must increase much more rapidly in the future than it has in the past. All of it will pass over the Sturgeon Bay route as soon as that route shall be made feasible by the opening of the proposed canal. The project is but of trifling cost (estimated, including the breakwater, at only $500,000,) in comparison with the great benefits it will secure to the commercial interests of the Northwest. There should be no hesitation in making, under proper restrictions. the grant that will be asked for.—*Daily Wisconsin, Nov. 21st.*

### Union Pacific Railroad.

Secretary Harlan pays a deserved tribute to this great work:

The amount of private capital already invested, the high personal character of the gentlemen connected with its prosecution and the munificent subsidy of the Government, combine to give assurance that the whole will be completed within the period fixed by law, thus furnishing a continuous line of railway from the Atlantic to the Pacific.

Its effects in promoting immigration, opening vast and rich regions of the Continent to settlement, developing our inexhaustible national resources and perpetuating the unity of the American people, will be more and more appreciated as it approaches completion.

As to the progress already made our readers are sufficiently posted. Engineers are surveying another hundred miles westward, and also looking for the most feasible route still further toward the mountains. He recommends the appointment of Government directors in each of the companies engaged in the construction of a branch on any part of the main line of this road.

The Fredonia *Censor* says that squads of hands are at work along the line of the Buffalo & Oil Creek Cross-Cut Railroad between Fredonia and Brockton and Corry and State line. About four hundred hands are at work.

### Uniform Coinage.

The Hon. John A. Kasson, who has just been made Chairman of the House Committee on Coins, Weights and Measures, has given much attention. both here and in Europe, to the subject of a common unit for all the currencies of the civilized world, and will, we trust, submit a proposition from his Committee to the House at an early day. Meanwhile, we make the following suggestion:

Perhaps the French *franc* is the unit which would be most generally acceptable. The gold Napoleon (20 francs) is current all over Europe, and on all the coasts of the Mediterranean. If the British shilling would be as widely acceptable across the ocean, it would suit us better; but we think it would not be so readily adopted elsewhere.

If the franc be taken, we should be required to reduce the value of our dollar a very little —not more that 2 cents—to make it equivalent to 5 francs; when our eagle would be 50 francs, and our double eagle 100 francs. Our smaller coins would need no adaption to the new standard. The franc in now all but identical in actual value with two of our dimes, and it would be fair to make that its legal value.

The British standard would have to be reduced the merest fraction to make 4 shillings equivalent to 5 francs, and the pound sterling to 25 francs. Then our dollar would be 4 shillings and the pound sterling $5, as they ought to be declared at once. The false pretence that our dollar is worth 4s. 6d sterling, when it falls far short of that amount, makes exchange on London 9 per cent. premium when it is really at par, and involves other misleading solecisms.

We urge all who would like a universal currency, and are prepared to throw light on the subject, to communicate with Mr. Kasson. If sufficient interest is evinced, we may have the needed reform fairly inaugurated at this session.—*N. Y. Tribune.*

### Railway Management.

The press is very severe on the present system: The *N. Y. Tribune* says:

"The chief thing which prevents a moderate rise in railway shares is the almost total want of confidence in them for regular income. The roads are still quarreling for business at unprofitable rates, and after paying tribute to freight agents, ticket sellers and transportation companies, they have little for their unfortunate shareholders, except dividends made from borrowed money by directors who operate in the stock market rather than upon their roads. In the language of *The Chicago Tribune* of Friday, "It would seem as if the railroad corporations of the North-West had moved bodily to Wall-st., where they are better known than in Chicago or any other Western city. The stock market seems to be their center of attraction, and not the management of their various lines in the West. The New York journals every few days record the manipulations that are being made by railroad managers, which might lead the uninitiated to believe that their roads ran through the streets of New York city rather than the States of Illinois, Wisconsin or Iowa. They are better skilled in working up "corners" in the stock market than in operating their lines in the West, and it is not strange that the mutual interest of stockholders and the public are neglected."

### Another Important Railway Connection.

Our readers may remember that English capitalists are largely interested in the railway line running North west from St. Paul in the direction of Pembina. It is understood that they have a controlling interest in it, and in fact, are furnishing moneys to build it. Their object is to reach the settlements of the Hudson Bay Company, and ultimately to extend the road up the valley of the Saskatchawan and across the Rocky Mountains to the Pacific. The long Winter embargo upon the navigation of the Mississippi, and the low water often virtually stopping navigation for several weeks if not months, during the summer, have induced these capitalists to undertake the early construction of the railroad down the Mississippi to Winona. An agreement on the part of the Northwestern Railway Company to have their line extended to Winoua by the time the road from St. Paul should reach that city, was signed a few days since by Hon. William B. Ogden, in New York.

Thus another most important railway enterprise will be completed within a year or two. The English capitalists, represented by C. J. Brydges, Esq., manager of the Grand Trunk Railway; Mr. Watkin, member of the British Parliament, and others, have an abundance of capital to complete their part of the contract as fast as it can profitably be done, and their immense interests in the North-west will urge them forward as rapidly as possible. The Northwestern road can, of course do all it undertakes, nnd we may, therefore, now look for the opening of its line to St. Paul, and also to Omaha, at an early day. We need not speculate upon the value of these lines to the entire North-west.—*Chicago Tribune.*

### Congress and Internal Improvements.

The following bills have been introduced since the 13th:

Dec. 14.

The Pacific Railroad.—On motion of Mr. Bidwell it was resolved that the committee having charge of the Pacific Railroad, be instructed to inquire what action, if any, is required on the part of Congress to expedite the work, and that they have leave to report by bill or otherwise.

Gold and Silver Lands.—Mr. Julian introduced a bill, which was referred to the Committee on Public Lands, providing for the snbdivision and salc of the gold and silver lands of the United States, and others containing valuable minerals, for the coining of the products of snch lands, and for other purposes.

Dec. 15.

Railroad to Washington.—Mr. Sloan, (Wis.) asked leave to introduce the following:

*Resolved*, That the Committee on Roads and Canals be directed to inquire whether persons visiting the national capital from the West are subjected to any unnecessary inconvenience or obstacles in passing through the City of Baltimore, and to report to this House at an early day whether it would be just and expedient to authorize the Northern Central Railroad Company of Pennsylvania to extend their road to this city.

John L. Thomas (Ind.) objected to the reception of the resolution.

The Albany Bridge.—Mr. Davis (N. Y.) introduced a hill, which was referred to the Committee on Roads and Canals, providing that the bridge being constructed over the Hudson River, at Albany, by the Hudson River Bridge Company, shall be a highway for the purposes authorized by the New-York Legislature and may be used as a postal route of the United States.

### A New Railroad.

It has been decided, after careful consideration, to intersect our State by a new Railroad, whose termini shall be New York and Oswego respectively, and which shall traverse the intervening counties in a generally north-westerly and south easterly direction. By this road, Syracuse and Oswego will be brought some forty miles nearer our city, while important sections of Onondaga, Oneida, Madison, Chenango, Otsego, Schoharie, Delaware, Greene, Ulster and Sullivan counties will be traversed which are now thirty to sixty miles from any facility for transportation and travel more effective than the ordinary farmer's wagon.

Oswego is chosen as the farther terminus, because it is the point nearest our city on the chain of great lakes, and because it is the principal focus not only of the trade of the Canadas with our seaboard, but of the Grain Trade of the West as well. Ten thousand barrels of flour daily are the product of but one of its manufactures, while it yields more in tolls to our Canals than any other city whatever. And both its manufactures and trade are constantly and rapidly increasing.

The Counties traversed by the proposed road have 700,000 inhabitants, whereof half a million will be customers to this road. Though but little more than half their area has yet been improved, their farms are officially valued at one hundred and eighty millions of dollars. Their timber, water-power, &c., invite to extensive manufacturing whenever they shall have tolerable facilities for intercourse with markets. Some of them—like Delaware and Sullivan—are skirted by a railroad; but this is separated from their population and production by a rugged wilderness seldom crossed by the mass of their people. We cannot doubt that the construction of this road will add many thousands to the population and more millions to the wealth of our State, and we hope to see it, under able management pushed to an early and economical completion.—*N. Y. Tribune.*

Another Railroad to Pittsburg.—We understand that the Atlantic & Great Western Railroad company, at a recent meeting, determined to extend the Cleveland & Mahoning road from Youngstown to Pittsburg, coming down the towing path of the canal to Mahoningtown, and thence by a route across the country to Pittsburg. It is said they also design making arrangements for the completion of the Connellsville road so as to furnish another outlet to the East. In that event it is supposed the Erie & Pittsburg road will extend their track to Mahoningtown and form a junction with the Cleveland & Mahoning line. This is an important enterprise, and if completed will give us two roads to New Castle and a new route to Cleveland.—*Pittsburg Dispatch, December* 4.

### East India Cotton.

The annual production of cotton in the East Indies, exclusive of the native States, is shown to be about 2,400,000,000 of pounds, or 6,000,000 bales of 400 pounds each. It is estimated that China produces twice as much, so that China and India together produce 18,000,000 bales annually.

### The Catawissa Railroad.

The Catawissa Railroad was originated in an act of Assembly passed in 1831. The road was opened from the head of the Schuylkill to Catawissa, on the North Branch of the Susquehanna, on the 17th July, 1854; and to Milton, on the West Branch, on the 7th September, 1854. Its length is 65 miles. The road was located by Edward Miller, Civil Engineer, now contractor.

In his first annual report, T. Harkins Du Puy, Esq., President, describes the romantic situation of the road, in these graphic words, to wit:

"The *peculiar* position of your road, commenced at a point *in the woods*, eight miles north of the town of Tamaqua, in Schuylkill county, with *two thirds of its whole length located on unproductive mountain sides, crossing deep ravines upon high bridges*, and ending at the town of Milton, on the West Branch of the Susquehanna river, has to some extent begotten an unjust feeling of distrust, and placed it, unnecessarily and unprofitably to all interests, almost wholly at the mercy of its termiual connection roads, *both of which have an alternative route to all our business points.*"

This description is copied for the information of the London readers of the *Register*, who are also informed that the "Ringtonn Trestle," 125 feet high and 1,170 feet long, is only one of a series of Edward Miller's beauties of railroad location. The Miller series of high bridges, it is only fair to state, may all be avoided by Mr. T. W. Kennard Chief Engineer of the Atlantic & Great Western Railroad, by building a new road in the bottom of the Catawissa Valley which Edward Miller shunned, for a location with "high bridges," "across deep ravines," "upon unproductive mountain sides."

The "Long Hollow Trestle," 130 feet high and 750 feet long, is destinated to great popularity among English tourists, who may be curious to inquire what it was that made the Catawissa Railroad worth a rental of a thousand dollars a day.

The Catawissa Railroad, after being in operation five years, was placed in the hands of a Receiver, appointed in 1859. In 1860 the company was reorganized. In August. 1864, its Directors paid a dividend of three per cent on its preferred shares. On the first day of Nov. 1865, the Catawissa Railroad was leased for a period of 999 years, at a rental of $365,000 per annum, to the Western Central Railroad Company of Pennsylvannia and the Atlantic & Great Western Railway Company of New York, Pennsylvania and Ohio. And such is an epitome of the birth, development and marriage contract of a romantic railroad, born of Edward Miller's strategic locating science, and wedded by a masterly guardianship to a foreign alliance that scorned to accept it at a low figure.—*R. R. & M. Register.*

☞The History of Mexico shows that during the last forty years, Mexico has had thirty-seven different forms of Government, thirty-two of which were "Republics," and seventy-five Presidents! Its revolutions during that time have amounted to over two hundred. Many years since a Mexican Protectorate was urged upon the United States Senate by Gen. Houston, upon the ground that the Mexican people otherwise would fall a prey to some European power. The project was condemned and abandoned. But perhaps in view of the past and present it would have been well.

## RAILROAD ITEMS.

### Important Railroad Suit Commenced.

PHILADELPHIA, December 13.

To-day in the Supreme Court. Chief Justice Woodward, the case of the Philadelphia and Erie Railroad Company and the Pennsylvania Railroad Company, *vs.* the Catawissa Railroad and Central Railroad Companies of Pennsylvania, and the Atlantic & Great Western Railroad Companies of Ohio, New York and Pennsylvania, for a special injunction restraining defendants and declaring null and void the lease of the Catawissa Railroad dated November 1, and also the contract dated October 31, between the Philadelphia & Erie, and Catawissa Railroad Companies, and that said contract be delivered up to be cancelled, was commenced.

It is stated that "a large number of the mortgage bonds of the Kansas branch of the Union Pacific Railroad have been presented at the Treasury Department, the parties holding them claiming an exchange of the Government bonds under the act of 1864. As Government bonds have been recently issued to this Company upon the affidavit of John D. Perry, President, his friends fear some trouble may result from his misapprehension of the facts when he made the affidavit. The Treasury Department will be exonerated from all blame in the matter, if no notice of the existence of these bonds had been presented to the Department, the act of Congress making it obligatory to deliver the bonds upon the evidence furnished. The effect will probably be to prevent any further issue of bonds to that Company until the matter is investigated."

The Pittsburgh *Chronicle* says that the Pennsylvania Central and the Philadelphia & Erie Company, (which in reality is all one,) have entered into a contract with Miller & Cartwright to construct the road from Irvine to Oil City by next May. The necessary means are to be realized by the issue of $1,300,000 of seven per cent. bonds by the Warren & Franklin Railroad Company, endorsed by both the Pennsylvania, and Philadelphia & Erie Railroad Companies. The distance is about fifty three miles.

Louis McLane, General Manager of the Pacific coast, of Wells, Fargo & Co., and James J. Tracy, Treasurer of the Overland Mail Company, lately rode over the Sierra Nevada to Virginia City, 116 miles, in 13 hours and 45 minutes, and from Virginia City to Salt Lake City, 584 miles in 64 hours and 20 minutes. By the same rate through to the Missouri river, one could go through from San Francisco to New York in twelve days.

The Pennsylvania Railroad Company will shortly commence the erection of a new, handsome and commodious passenger depot, on the extensive grounds southwest corner of Thirty-first and Bridge streets, West Philadelphia, which are now being graded. It will be a great accommodation to the public, especially to those arriving in the city from the West. It is but a few squares to Fairmount, where passenger cars may be taken to all sections of the city.

RENO & PITHOLE R R.—The grading and trestle-work are completed to Rouseville, and the bridge across Oil Creek progressing rapidly. The track is laid for five miles. One locomotive is received.

From a periodical return on French railways, just issued by the Minister of Public Works, it appears almost certain that for the next seven years the work of railway construction will proceed at the rate of 500 miles per annum. The new lines on hand and mapped out, do not sustain the productibility attained by the old net works; nevertheless, with the help of the State guarantee of 4 55 per cent upon the capital enagegd, they will be carried out systematically. The French demand for rails and railway iron and plant can then be calculated with great exactitude.

The Titusville & Pithole Railroad, the Oil Creek Lake and Titusville Mining & Transportation Company, and the Westfield Railroad Company have been consolidated into one company, to be called the Westfield, Titusville & Pithole Railroad Company. This line will include the proposed railroad from Titusville to Union.

The Corinth (Miss.) *Enquirer* says:

The Nashville & Chattanooga Railroad Company have instituted proceedings in the Chancery Court for the sum of one million dollars, against Colonel V. K. Stevenson, late President of the Company. The ground for the action is the use of the machinery of the road, while it was in the South during the war.

The Atlanta *Intelligencer* learns, on good authority, that the railroad from Augusta to Savannah will probably be repaired and in running order about the first of January next. A much longer period will be required to repair the road from Augusta to Charleston, about fifty miles of which, between Branchville and Johnson's Turnout, are now totally destroyed. The break will hardly be closed before summer.

At a meeting in England of the Atlantic & Great Western Railway stockholders, Sir Morton Peto and Mr. Forbes made elaborate statements and reports upon the condition and prospects of the lines, which they represented as encouraging.

The following gentlemen compose the Standing Committee on Pacific Railroad, as announced by the Speaker of the House of Representatives: Price, of Iowa; Stevens, of Pennsylvania; Donnelly, of Minnesota; Ames, of Massachusetts; Brooks, of New York; Loan, of Missouri; Clark, of Kansas; Bidwell, of California; and Henderson, of Oregon.

THE MARIETTA RAILROAD.—The new line of the Marietta Railroad, between Loveland and the city, is in such a state of completion as to warrant the Company in saying that they will commence running regular trains on it by the first of February next.

Friends of the South-west Branch Pacific Railroad are opposing the sale of Kansas City & Leavenworth Railroad bonds, and demanding of the Company to apply its energies to finishing that road instead of the Leavenworth road.

The exports of railway iron to British India have made a considerable stride this year, having amounted to 68,386 tons, against 35,593 tons in the corresponding period of 1864, and 60,662 tons in the corresponding period of 1863.

More than fourteen hundred men are now employed on the Reno, Oil Creek and Pithole Railroad. General Burnside is superintending the work, and if the weather remains favorable, the road will be completed by the 1st of January, 1866.

The land sales of the Hannibal & St. Jo. Railroad, for the month of October, amounted to some $70,000; being the largest sales ever made in any one month.

It is proposed to build a railroad from Chicago across the State of Michigan to Port Huron, where it will connect with the Canada roads.

It is reported that the Government has taken possession of the Mobile & Ohio Railroad south of Corinth, for the purpose of transporting Government cotton, which is being stolen and destroyed in large quantities.

Adams & Co's Express Company has loaned $2,000,000 of its accumulated capital to several of the Southern railroads, and thus enabled them to resume operations.

Thomas Bell has been appointed General Superintendent of the Detroit & Milwaukee Railroad, *vice* W. K. Muir resigned.

The Lehigh *Register* understands that on the 1st of February, 1866, the name of the Morris & Essex Railroad will be changed to Atlantic, Pacific & Great Western.

The Adams and Southern Express Companies have arranged that the latter shall take charge of all the business south of Nashville, after the 1st of January.

A passenger depot 350 feet long, and 82 ft. wide is in process of erection at St. Albons, Vermont.

### Railroad Accidents.

An accident occurred on the 10th instant about 4 o'clock, A. M., ten miles west of Sunbury, Pa., to the express train on the Philadelphia & Erie Railroad which left Erie on Saturday afternoon. By some accident, as yet unexplained, the baggage car caught fire and was totally consumed, together with all the baggage of the passengers. The amount of loss is unknown. The mail train going west, on the same road, on Saturday, came in collision with a freight train, near Williamsport. One man had his leg broken, and some damage was done to the cars.

On the 11th inst., Henry R. Morrison of Utica, an engineer on the New-York Central Railroad for the past 16 years, and the oldest engineer on that division, killed himself by taking laudanum. He had a fall some time since, the injury from which prevented sleep, and he had been in the habit of taking laudanum to produce sleep, and it is thought he unintentionally took an overdose.

A locomotive exploded at Carrollton on the 5th inst. Mark Marks, a brakeman, had a leg broken and was severely scalded. August Wells, freight clerk, was severely scalded. On examination, the sheets which gave way, were found to be only one sixteenth of an inch thick.

By the breaking of a rail on the Little Miami road last Friday, two cars were thrown off the track, and a passenger on the platform of the car was killed. The conductor was considerably bruised.

## MONETARY AND COMMERCIAL.

The general tone of the market for the past week has been low. A decided decline in flour has been anticipated. The large quantity of gold thrown on the market, some $7,000,000, had no perceptible effect on the price, which obstinately remains at 145.

The Cincinnati Chamber of Commerce has endorsed Secretary McCulloch's policy, an example which should be followed by all the Boards of Trade in the country.

The following were the closing quotations for exchange and coin:

| | Buying. | Selling. |
|---|---|---|
| New York | par | 1-10 prem |
| Philadelphia | par | 1-10 prem. |
| Boston | par | 1-10 prem. |
| Gold | 145½ | 146¼@146½ |
| Silver | 138@140 | 140@141 |

Stock quotations compare as follows:

| | Tues A. M. | Wed. P. M |
|---|---|---|
| U. S. 6 per cent. Bonds, 1881 | 107⅜ | 107⅜ |
| " 5-20 " old | 103⅛ | 103 |
| " 5-20 " 1864 | 100⅛ | 100⅛ |
| " 5-20 " 1865 | 100⅜ | 100⅛ |
| " 10-40 " | 92⅛ | 92⅛ |
| " One-year Certificates | 97⅜ | 97⅜ |
| 7-30s, 1st series | 97⅛ | 97⅛ |
| 7-30s, 2d series | 0 ⅛ | 97⅜ |
| 7-30s, 3d series | 97⅜ | 97⅜ |
| New York Central | 96 | 05⅞ |
| Erie | 93⅜ | 94⅜ |
| Hudson River | 108¼ | 108¾ |
| Reading | 106⅜ | 106⅞ |
| Michigan Central | 115⅜ | 115 |
| Michigan Southern | 75⅞ | 75⅝ |
| Illinois Central | .. | .... |
| Cleveland & Pittsburg | 88 | 87¾ |
| Chicago & Northwestern | 36½ | 36 |
| " " pref. | 62¾ | 61¾ |
| Cleveland & Toledo | 111 | 114 |
| Rock Island | 107⅜ | 107⅜ |
| Pitts., Ft. Wayne & Chicago | 105¼ | 105⅛ |
| Ohio & Mississippi Certificates | 28⅞ | 29⅛ |

The N. Y. *Tribune* says:

The report of the New York York Central has had a depressing effect upon Railway property. To break its force it is argued that legislation is desired and that important facts are concealed. Every one employing labor, and engaged in transportation knows that this argument of concealment is unfounded, and that the statements of its managers are correct. Everything Railways have bought for the past four years has been steadily advancing, and they have been unable to get a corresponding advance upon their fares and freights, both of which are now levied upon by express companies, transportation agencies and ticket agencies to a degree hardly credible, and which calls for immediate reform.

The theory that the New York Central report has been "cooked" for legislative purposes will not bear examination, and the construction account cannot be fairly used to cover the cost of ordinary repairs. The balance sheet fairly made up, stands as follows:

| | | |
|---|---|---|
| Earnings in 1865 | | $13,975,524 |
| Operating expenses | $10,8[illegible]2,358 | |
| Interest, U. S. taxes, S. fund, and rents | 1,483 603 | |
| Increase of stock and bonds in 1865 | 1,621,101 | 13,987,262 |
| Deficit | | $11,738 |
| Dividends paid from borrowed money | | 1,542,933 |

The wood account has only been brought up to standard so far as quantity is concerned. The road reported in

| | | | |
|---|---|---|---|
| 1862 | 211,409 cords | 1864 | 42,432 cords |
| 1863 | 154,355 cords | 1865 | 208,768 cords |

In 1856, the first year of consolidation, 174,215 cords were reported. What is true of its fuel is true of its other supplies, and the expenditures of 1865 have only brought them up to the proper standard.

The attempt to make construction and not operating expenses bear the cost of $659,300 of new cars and engines will not succeed. Since 1856, the officers of the road have regularly declared that they have no construction account for cars. In 1862, the road added 10 engines and 764 freight cars to its equiment, and charged its yearly repairs of engines and cars at $1,707,000. In 1865, it adds 17 engines; 18 passenger cars and 322 freight cars, and reports the repairs at $1,869,000. The report is not calculated to improve railway property, but it is as good as the company can make, and there is no occasion to call in question the truth of its managers, whose statements bear their oaths. If a dividend is to be paid in February, 1866, its bona fide shareholders and the Legislature would like to see it accompanied by a balance sheet (brought up to February) such as the Michigan Central Road is in the habit of making.

The Central Railroad Company has reduced its rates on Eastern freights, except to New York. The new tariff took effect on the 13th inst, and the rates are as follows:

| | |
|---|---|
| Fourth-class to Albany, Troy and Schenectady | 45c. ₱ 100 lb. |
| Flour to Albany, Troy and Schenectady | 90c. ₱ bbl. |
| Fourth-class to Boston | 65c. ₱ 100 lb. |
| Flour to Boston | $1 30 ₱ bbl. |
| Dressed Hogs to Albany, Troy and Schenectady | 50c. ₱ 100 lb. |
| Dressed Hogs to New York | 80c. ₱ 100 lb. |
| Dressed Hogs to Boston | 90c. ₱ 100 lb. |

### Railroad Earnings.

For month of November —

| | 1865. | 1864. | Increase. |
|---|---|---|---|
| Cleveland & Pittsburg | $220,137 | $220,062 | $ 75 |
| Erie | 1,451 217 | 1,222,568 | 228,649 |
| Pittsb. Ft. W & Chic | 712,000 | 691,556 | 20,444 |
| Norwich & Worcester | 60,098 | 53,726 | 6,371 |

First Week in December—

| | 1865. | 1864. | Increase. |
|---|---|---|---|
| Racine & Mississippi | $9,462 | $9,124 | $ 337 |
| Rock Island | 52,131 | 71,375 | *19,244 |
| Michigan Southern | 86,890 | 91,306 | *4,416 |
| Detroit & Milwaukee | 32,661 | 27,598 | 5 063 |
| Chicago & Northwestern | 134,823 | 147,542 | *12,719 |
| Gt. West'n, of Canada | 63,389 | 56,613 | 6,766 |

*Decrease.

The Cleveland & Pittsburgh transfers close to-day (15th) and open on the 3d of January, 1866, and will not be closed again for the dividend payable January 10

The Michigan Central has reduced its January dividend to 5 per cent, and will make no stock dividend.

The Illinois Central Railroad Company will pay 1st of February a dividend of 5 per cent. The books will close 20th January, and will reopen 3d of February.

The Reading Railroad has declared a dividend of 10 per cent in cash, or stock, at the option of the shareholder.

A dispatch from Washington says there are indications that Congress will be called upon to legislate extensively in regard to railroads this winter. The through line between Washington and New York will receive early attention; and, also, a plan for extending the Northern Central Road from Baltimore to Washington.

At the annual meeting of the Ohio & Mississippi road the earnings were reported to show an increase of $448,062 over those of 1864, with a decrease in the expenses of $149,096, making the net earnings $597,159 larger than those of last year. The report estimates that the business for the year ending Dec. 31, 1865, will show a balance of earnings over expenditures amounting to $1,016,622.

The earnings of the Missouri Pacific Railroad since its completion to Kansas City, have considerably more than doubled, and George R. Taylor, its President, predicts that by 1870 the earnings will not amount to less than a million of dollars per month.

The Pittsburgh, Ft. Wayne & Chicago road has declared its usual dividend of 2½ per cent.

The last mail from London brought to the Atlantis & Great Western Office in this city advices of the successful negotiation of the 7 per cent. mortgage bonds of the company, to £2,771,600 stearling, out of a consolidated general mortgage on the property of the company of £6,000,000 stearling, The remainder of £3,228,400 is reserved to take up the existing sterling and federal mortgages as they mature. The share capital of the company is made equal in amount to the mortgage, £6,000.000 stearling, or $30,000,000, divided into 600,000 shares of $50 each. The proceeds of the present negotiation of bonds, at the rate of 80 per cent., are equal to about. $11,106,640 in gold, or about $16,300,000 of our present currency. The installments on the scrip or allotments run from 25th November, (or date of allotment,) to 15th March, and will be drawn for, as wanted for the Road on this side, almost immediately. A private letter by the Java says that the scrip was already at a premium of ½@¾ per cent. of the allotment price.

The Collector of Internal Revenue for Montana Territory reports the product of the gold and silver mines of that Territory for the year 1865 to be upward of $16,000,000. In 1862 the Territory was a wilderness.

SHORTENING THE MISSISSIPPI RIVER. — A resident of Memphis has addressed the Governor of Mississippi, recommending to his attention a scheme for shortening the Mississippi river. The proposition is to lessen the distance between Cairo and New Orleans 300 miles, or to reduce it from 1,200 to 900 miles. The effect would be to increase the current one-fourth, or to give for high water, a current of seven miles per hour instead of five, and for low water a current of five miles per hour instead of three. A part of this scheme is to dam up Red river near its junction with the Mississippi, so as to throw the waters which seek an outlet through Red river into the Atchafalaya and Berwick's Bay. Not to damage the commerce of New Orleans, an iron lock is to be placed in the dam, so as to let boats into and out of the Mississippi through Red river. Another part of the plan contemplates that all the outlets, both natural and artificial, from near the mouth of Red river, on the west bank of the Mississippi river, to Pine Bluff, Arkansas, would be opened, small streams straightened, and their banks leveed, thus opening a system of drainage through a country embracing the best portion of Arkansas, at the same time with these positive outlets, drawing large quantities of water from the Mississippi, never to return.

Of the practicability of this shortening scheme, observing river men and those whose business it is to solve questions in hydraulics, are better judges than we are. Aside from this question it may occur to some minds that there is a previous one of some interest. That is, whether after all, looking at the interest of the whole Mississippi border, a river 1,200 miles long is not better than one quarter less, especially when the curtailed distance is purchased at the expense of such an increase in the velocity of the current as will retard the passage of boats ascending the stream, without a full compensation in the gain made by boats descending it.

## Best Route to St. Louis and Chicago

### MONDAY, OCT. 31.

## Indianapolis and Cincinnati



## RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House. Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt

## BENJ. H. LATROBE AND C. H. LATROBE,

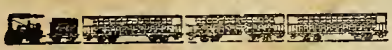
### CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

### LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also, the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

## The Old And Reliable Route.



Through to Pittsburg without Change.

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

## Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:30 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.



TWO THROUGH TRAINS DAILY

TO

### EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Nigbt Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:00 A. M. | 10:40 P. M. |
| HAMILTON..... | 9:57 " | 11:43 " |
| DAYTON..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

### THIS IS THE ONLY ROUTE

TO THE

### OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

### A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

### SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

### Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

### CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

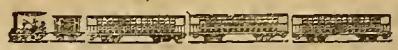
Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast cornor of Broadway and Front streets, and at No. 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, } Passenger Agents.
CHAS. COOK, }

## CENTRAL RAILROAD

—OF—

## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 4:00; 3:30; 5:30; 7:30 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:06; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.90; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex. 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p, m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a, m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Nangatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

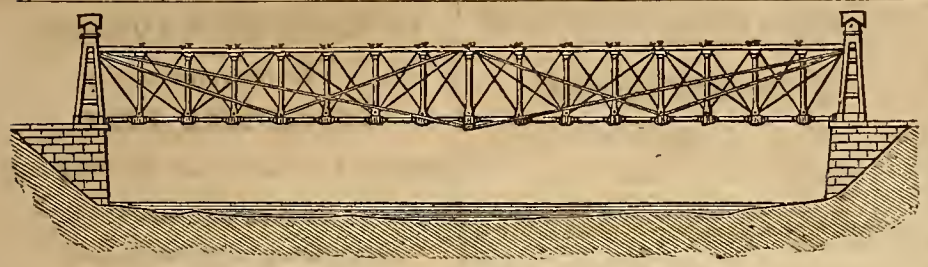
Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

## NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



(*Plan of Bridge.*)

## FINK'S PATENT
## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

**SCREW BOLTS,**

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Tbresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

## LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

## KNOX & SHAIN,

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

## FINDINGS,

AND

## MACHINERY,

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

**BUSH & LOBDELL,**

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

## Chilled Wheels and Tyres

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

## AMERICAN BANK NOTE COMPANY.

*Bank Note Engravers & Printers.*

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

## SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

## RAILWAY SPRINGS.

**FREIGHT**





**PASSENGER**



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y.

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

**PERKINS, LIVINGSTON & POST,**

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

**STOCK BROKER,**

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collections.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

**SPEED, SECURITY AND COMFORT.**

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Centra Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest Central West and Southwest. At Harper's Ferry with th. Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH, *Master Transportation, Baltimore*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express..... | 6 00 A. M. | 6 30 P. M. |
| Mail and Express..... | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation..... | 4 00 P. M. | 11 45 A M. |
| Morrow Accommodation..... | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express..... | 10 00 P. M. | 7 50 A. M |

☞Sle-ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City.. | 6 00 A. M. | 10 05 P M. |
| Toledo & Detroit..... | 7 00 A M. | 9 45 P. M |
| Dayton & Sandusky Mail..... | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago..... | 7 00 A. M. | 9 25 P M. |
| Mail and Express..... | 9 40 A M. | 6 30 P. M. |
| Dayton Accommodation..... | 2 10 P. M. | 9 25 P M. |
| Indianapolis & Cambridge City.. | 4 00 P. M. | 12 25 P. M |
| Toledo, Detroit, & Huntsville.... | 5 00 P. M. | 12 50 P M |
| Hamilton Accommodation..... | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago..... | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express..... | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation..... | | 7 55 A M |

Sleeping Cars on the 5 00 P M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R

**Three Trains Daily.**

Except Saturdays and Sundays.

***For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.***

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | | |
|---|---|---|
| Louisville, St, Louis and Cairo Depart. | | Arrive. |
| Mail..... | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville.... | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train..... | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. O. H. POLLETT, General Ticket Agent.

W. D. GRISWOLD General Supt.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:26 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either offics.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

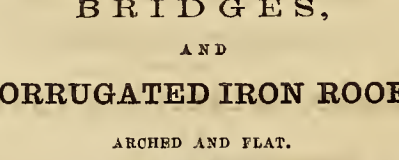
## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



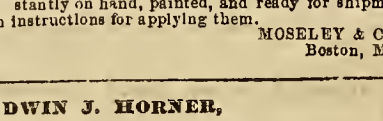
CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipmsnt, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

## CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

## LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diamster, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches for same. &c.,

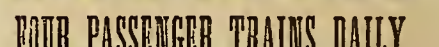
**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!



## FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, DECEMBER 28, 1865.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

**W. A. MUNSELL,**
*General Agent.*


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | *Depart.* | *Arrive.* |
|---|---|---|
| Cincinnati Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:00 P. M. | 4:00 A. M. |
| Morrow Accommodation | 5:30 P. M. | 8:00 A. M. |
| Night Express | 7:00 P. M. | 3:50 P. M |
| Night Express | 10:00 P. M. | 9:40 A. M. |

MARIETTA AND CINCINNATI,

| | | |
|---|---|---|
| Mail | 5:00 A. M. | 7:30 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P. M. | 5:45 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Indianapolis & Cambridge City | 7:00 A M. | 9:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:50 P. M. |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P M. |
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| Dayton Accommodation | 6:45 P. M. | 9:35 P. M. |
| Dayton, Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A. M. |
| Richmond & Chicago | 5:30 P. M. | 1:10 P. M. |

CHICAGO & GREAT EASTERN.

| | | |
|---|---|---|
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " " | 5:30 P. M. | 1:20 P. M. |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Mail & Springfield Express | 2:00 P. M. | 4:30 P. M. |
| St. Louis and Chicago Express | 7:30 P. M. | 1:10 A. M. |
| Lawrenceburg and Harrison Accommodation | 4:30 P. M. | 8:30 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:20 P. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R.

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M. | 4:35 P. M. |
| Caboose Accommodation | 4:00 P. M. | 8:00 A. M. |

KENTUCKY CENTRAL.

| | | |
|---|---|---|
| Express | 6:00 A. M. | 6:30 P. M |
| Accommodation | 1:50 P. M. | 11:00 A. M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Morning Express | 9:40 A. M. | 6:30 P. M. |
| Night Express | 10:50 P. M. | 7:30 A. M. |

### The Treasury Account; Revenues, Debts, and Resources of the Country.

The Secretary of the Treasury has presented his Annual Account; and stated his views on the Finances and Currency. It is an interesting document, and on the whole an encouraging account of our financial affairs. There are three thoughts, however, suggested by it, which give a grave aspect to this subject.

1. That our debt is not only very large, but, that it is considerably greater than the public has been led to suppose. In his *tabular* views of the public debt on the 1st of December, he states the whole debt at $2,714,000,000 —which is a *reduction* of the debt on the 1st of July, of $43,000,000. If this was a true statement, it is an encouraging one, and was so felt by the public; but in his Treasury Report, he says, he thinks the Public Debt will not exceed *three thousand millions*—that is, $286,000,000 more than the table represents! How is this? We suppose this is the *outstanding claims, not yet audited.* We hope it is not so large; but, here is the estimate of the Secretary, who ought to have better means than we have of estimating the amounts yet due. It is quite probable, as we shall see hereafter, that in consequence of the future income, largely exceeding the expenditures, this increased amount may never appear in the tabular statement, being paid out of the annual revenue. But, it is a pressing demand on the Treasury, and must be paid, if not as a part of the funded debt, as a part of the current debt, out of the revenue; but, in either case it has to be paid, and whatever the amount, it is so much more than was apparent in the tabular statements of the Treasury.

2. It is apparent, that what may be called the *immediate liabilities* of the Treasury are immense. As far as we can gather them from the Treasury report and statements, they are as follows:

| | |
|---|---|
| 1. Legal Tender Notes | $400,000,000 |
| 2. Fractional Currency | 27,000,000 |
| 3. Compound Interest Notes | 167,000,000 |
| 4. Certificates of Debt | 55,000,000 |
| 5. Deposits of Money | 90,000,000 |
| 6. Floating Debts | 286,000,000 |
| Immediate liabilities | $1,025,000,000 |

Here, according to the Treasury Statement, are more than a *thousand million of dollars*, which are due *now;* but, on the other hand, it is true that the currency will not be demanded, that the outstanding claims will be audited slowly, and that the Government can always retain a large amount on deposit. Still it is a great fact, standing out in the financial statement, that there are a *thousand million of dollars* due on demand.

3. When the Secretary looks upon this vast system of Government Banking, he sees that it is dangerous, and sees much more forcibly that the position of the Secretary of the Treasury is one of marvellous difficulty; he could say more truly than King Henry,—

"Uneasy is the head that wears a crown."

The head of such an enormous bank trembles to think of his giddy situation. He, therefore, looks round to see how he can escape some of his difficulties. This leads us to a very singular result. The Secretary knows that he *must* fund some part of this debt, if it be possible. He therefore proposes to issue several hundred million of 6 per cent. bonds. There is nothing strange in this; but, what he proposes first *is* strange,—that we should issue two hundred millions of *interest bearing notes*, to take off two hundred millions of legal tenders, which bear no interest! Yet, this is the proposition of the Secretary. Supposing it best to take in the legal tenders, it seems quite obvious to us, that this is not the right way to do it. There is no need of it. Why pay interest for our debts, if we can keep them out without it? Let us suppose it done, and the Secretary succeeds in getting in half only of the legal tenders (and he won't get more) for bonds at fifteen years 6 per cent. (and we cannot pay them in less time), what does it amount to?

| | |
|---|---|
| We pay | $200,000,000 |
| By giving principal | 200,000,000 |
| By 15 years Interest | 180,000,000 |

That is, to pay two hundred millions, we pay that, and *one hundred and eighty millions over for nothing!* We presume that a bare statement of this operation will be enough to show its true bearings, to any sensible man. But some one will say, how would you redeem these legal tender notes? We answer, precisely as they were issued. They were issued as current funds, in payment of the demands against,—now, let them be taken in as they come *in payments to the Treasury.* This they will do, under two conditions: 1. That the Treasury has a surplus revenue, in which case it receives more than it pays out, and this will be in current notes; 2d. That the people are willing to pay them in. It is quite probable, that few of those notes will flow in at all; for, they are the preferred currency. At any rate, this is the natural and only economical mode of redeeming them.

But, some one, who does not agree with the Secretary, will say, why take in the legal tender notes at all? Why not let them remain a currency, till other debts are paid? We strongly suspect, that if it was left to popular opinion, the vote would be largely against the Secretary's plan. At any rate, we are in danger of great difficulties, if the Secretary of the Treasury, leaving his proper business of attending to the finances of the nation, undertakes to regulate its currency. The Government is our banker, and if it undertakes to withdraw the currency it has given the public, in any other manner than in the regular way of business, there will assuredly be a shock which will be felt from one end of the land to

the other. There is no need of this. All the Secretary need do with the currency, is to let it come, in the regular course of business. This withdrawal will never be felt.

In one part of the Treasury operations, there is a real cause of hope and rejoicing. It is that the revenue off the current year will exceed the expenses; and that thus there will be an actual surplus for the payment of debts. According to our estimate, the revenue of the current year will reach *five hundred millions of dollars*. If this is allowed to continue, we shall *pay our whole debt in twenty years;* and we believe that *it will* be done.

### How to use the Fenian Fund.

The utter futility of the Fenian attempt to liberate Ireland must be apparent to all who are not interested in keeping up the delusion. The English government, with its spies on every hand, has promptly checkmated the daring schemers, and visited its vengeance with a heavy hand upon the unfortunates within reach. The organization can only show its teeth and growl defiance—for "perfidious Albion" lies many a league eastward, and a waste of water strongly guarded by armed ships presents an insurmountable obstacle to this patriotic but powerless brotherhood.

With characteristic generosity, the Irish have poured money in abundance into the Treasury, and will continue to do so for an indefinite period. Assuming, as we have, the failure of the origiual plot, how will these dime contributions be expended. Will they disappear in luxurious mansions for the leaders, and the expenses of a high court, or vanish in the mysterious item of "sundries."

There *is* a use for these accumulated funds, which will be alike creditable to the Irish element and profitable to Ireland and America. Thousands of Ireland's inhabitants, despairing of freedom in their own country, turn their longing eyes to the great nation in the west, where the luxuriant soil, and outcropping mineral wealth await their stout arms and willing industry. Their dreams of freedom may here find the accomplishment that cannot be hoped for, even were their native country wrenched from British rule; for England's policy would be one of unceasing aggression, and exhausting war would depopulate the island. Let this fund, therefore, be set aside to promote emigration. Form, if possible, a perpetual fund, by binding each emigrant to repay, in a specified time, the sum advanced. Instead of turning the immigrants loose in the streets of New York, let them be colonized on the broad and fertile prairies and the exhaustless mining districts of the West, on the line of our Pacific Railroads. In the hands of competent agents, the project would be a glorious success, and the descendants of these Pilgrims would have abundant cause to bless the wise diversion of the Fenian movement from a useless struggle to a successful emancipation.

Let the leaders consider in time whether they will be branded with ignominious failure, or be hailed as the benefactors of their race.

### Cincinnati & Fort Wayne Railroad.

*Resolutions of the Board at their Meeting on the 19th inst.*

WHEREAS, There is now $205,000 of stock subscribed to the Cincinnati & Fort Wayne Railroad; and whereas, the Board are now convinced that an amount of stock can be taken sufficient to make the road ready for the iron; and whereas, there is means belonging to said Company yet unexpended, and the Board are convinced that the time has come to go into active operations on the road, therefore,

*Resolved*, That a survey of the road be made at once from Richmond to Winchester, to ascertain the cost of making the road ready for the iron and prepare it ready for work, and make report to this Board.

*Resolved*, That stock solicitors and Directors holding notes or stock subscriptions, shall return the same to the Secretary of the Company on or before the first day of February, 1866; and that the Secretary be required to register all such notes and subscriptions so made to said company and such evidence shall entitle all such subscribers to vote for Directors of said company.

*Resolved*, That there be appointed a committee of three persons to visit Cincinnati, to make the necessary arrangement with responsible and interested railroad companies to indorse our bonds for the purpose of procuring the iron, and that said committee are hereby instructed to say to any such responsible company who will indorse our bonds that this Board will forthwith mortgage the road bed; and that said committee report the success of their confereuce to the President of the road, and, if favorable, that this Board be forthwith called together to take steps to secure the purchase and delivery of the iron.

On motion, John W. Grubbs, William Reed and Judge S. Colgrove, were appointed that committee.

Cincinnatians should aid the above road. It is a direct connection with the system that unites our city with the great northern lumber region, and will be an advantage in furnishing cheap building material. We trust our citizens will see the advantages to be gained by extending "material aid" to this Company.

### Important Railroad Case.

PHILADELPHIA, December 13.—To-day, in the Supreme Court of this State, Chief Justice Woodward, presiding, in the case of the Philadelphia & Erie Railroad and Pennsylvania Railroad Companies *vs.* the Catawissa Railroad, the Western Central Railroad, of Pennsylvania, and the Atlantic & Great Western Railroad Companies, of Ohio, New York and Pennsylvania, delivered a decision, granting a special injunction, restraining the defendants, and declaring null and void the lease of the Catawissa Railroad, dated 1st of November, and also the contract dated 31st of October, between the Philadelphia & Erie and Catawissa Companies, and that said contract be delivered up to be cancelled.

### Georgia Railroads.

A correspondent of the Chicago Tribune, writing from Savannah, Georgia, in speaking of the Georgia railroads, says:

"The destruction of railroads in this State was as great as in South Carolina, but the energy of the people in repairing damages is much greater, and, therefore, communication between the different sections ever reached by the cars, is much more readily made here than there.

"So far as I know, there are but five stage lines or routes in the State, over three of which I had travelled. I can't say that either the vehicles or the animals are respectably good, but I can fairly own that neither are quite so bad as those in Carolina. I must decline, however, to recommend any of the lines to the patronage of the traveling public, though I will add that the use of either will furnish many new sensations to travelers from civilized countries.

"The long line of railroad from Chattanooga to Atlanta, and thence to Augusta, and the line from Macon to Atlanta, are in good order, and run two passenger trains each per day, which make an average rate of fourteen or fifteen miles an hour. The lines from Macon to Eatonton, from Macon to Columbus, and from Macon to Albany, are in passable condition, but need heavy expenditures, both for iron and rolling stock. Each line runs but one passenger train daily, making not over nine or ten miles per hour. The line from Atlanta to West Point, and the partially reconstructed line from Augusta to Savanuah, are in a deplorable condition every way—the single passenger train on each being made up of box freight cars with rude benches, or of second-class passenger coaches in the last stages of decrepitude. I said, in a former letter, that there were forty miles of the line from Augusta to Savannah not yet rebuilt and not likely to be for some months to come. The officers of the Atlantic & Gulf road have brought out about one hundred white laborers and have them at work on the sixty miles of their line destroyed by the army. The long line from Macon to Millen was almost entirely destroyed by Kilpatrick, and very little has yet been done toward rebuilding it."

Railroad fares in the State have been very considerably advanced during the last month. On the Atlanta and Augusta line the passenger rate is now a fraction over *six cents* a mile; on all other roads it averages about eight and a quarter cents a mile.

### Egyptian Railways.

The Government is vigorously prosecuting its system of internal improvements. In the Delta of the Nile alone there are completed and in successful operation about five hundred and fifty miles of railway, involving a capital estimated at $35,000,000. To these lines will soon be added new ones, on which the rails are being laid as fast as the grading can be completed, and which will add some four hundred miles. After connecting the most important towns of the Delta, the new lines will penetrate the regions of Upper Egypt, so that however low the waters of the Nile may fall hereafter, during the dry season, the facility of communication will not be impeded. It is also a satisfaction to know that the time is approaching when the lower cataract of the Nile, that of Assonan, will be only a few days distant from Cairo.

### The Railroads into Wyoming Valley.

It is a source of gratulation to those who have been patiently waiting for the development of the vast resources of this valley, to observe that capitalists elsewhere have at last waked up to their own interests. After years of sleepy apathy, during which the few loads of Wyoming coal that found their way to market, were taken hy the slow process of the canal, we are now enabled to announce, with some degree of certainty, that at least three railroads are in progress which point directly to the vast body of coal that underlies almost every acre of land between the Lackawanna and Nanticoke, on the east side of the river; while the bridge now almost finished across the Susquehanna, near the Boston works, will open the mines on the Plymouth side to a market they have never yet known. These roads are: the Nanticoke, with its extension; the light track which the Lehigh Navigation Company have been for two years building down the mountain, to avoid the planes, and the Lehigh Valley road into this valley. This last we regard as by far the most important, for the reason that it requires but the link from White Haven to Wilkesbarre to complete a thorough line from the mouth of the Wyoming mines to the sea-board and to New York and Philadelphia; and this, too, at a uniform rate of tolls for the whole distance to the Delaware at Easton.

True, coal is now loaded into cars here and transported via the Lehigh & Susquehanna Railroad to White Haven, whence it is taken over the Lehigh Valley Railroad to the destination above indicated; but when we state that shippers are charged more than double the rate from here to White Haven (say three and a fourth cents per mile) than they are from White Haven to Penn Haven, over the Lehigh Valley (about the same distance,) the importance of the early completion of the latter into this valley will be seen at a glance. The Lehigh Valley Company is a live, energetic corporation. Wherever it has operated, or extended its arms, it has infused thrift and prosperity into every avenue of business. Besides, it has never aspired to anything else than to be an independent *common carrier*. Its policy from the start has been calculated to develop the resources of the country through which it passed, by the exercise of a broad liberallity; and we say, unhesitatingly, that in pursuance of this policy, it will he their purpose to enable our operators to compete successfully with those of the Mahonoy, Beaver Meadow and Hazleton regions. In other words, coal shipped from the Wyoming mines, after the completion of the extension alluded to over the Lehigh Valley, will cost the owners no more at Penn Haven than the same article will cost from the other coal fields.

These reflections are induced by seeing the engineers and operators on the ground, with that apparent earnestness which augurs the early completion of the work. We understand that contractors are at work in both Hanover and Newport townships, in the valley, while the sections are also let between White Haven and the top of the Wilkesbarre Mountain. It is designed to have the road done by May, 1867, if possible, or at farthest within that year. In this state of facts, we deem it advisable to drop a word of caution to our coal operators, viz; While at least two inchoate lines over the same route will be competing for your business, do not be in haste in making contracts with either. Stand aloof in this matter until both lines are completed; form no entangling alliances; bide your time, and when both lines are ready to carry your coal to market, you can make your choice more wisely than now.

In addition to the lines above mentioned, we hear considerable about the commencement of work on the gravity road from here to New York, via Stroudsburg, or the Delaware Water Gap. Should this be started, our friends would find another "Richmond in the field" who will be no mean competitor.—*Wilkesbarre Union.*

### Congress and Internal Improvements.

SENATE, Dec. 18, 1865.

THE EUROPEAN AND NORTH AMERICAN RAILWAY.

Mr. Morrill introduced a bill to provide for the defense of the north-eastern frontier, which provides for the repayment to Maine of appropriations for the construction of the European and North American Railway. The bill was referred to the Committee on Foreign Relations.

COAL LANDS AND TOWN PROPERTY.

Mr. Conness introduced a bill to amend an act for the disposal of coal lands and town property, which allows the right to enter 160 acres of coal lands to any person actually engaged in coal mining upon the premises at the passage of that act, and fixes the price at $20 per acre. A declaratory descriptive statement of such lands and improvements is required to be filed within one year from the passage of the act, and proof and payment within one year thereafter.

The bill was referred to the Committee on Public Lands.

## HOUSE.

INTERNAL COMMERCE.

Mr. Washburne (Ill.,) said he was instructed by the Committee on Commerce to report the following bill:

*Whereas*, The Constitution of the United States confers on Congress in express terms the power to regulate commerce among the several States; to establish post roads, and to raise and support armies, therefore,

*Resolved*, By the Senate and House of Representatives of the United States in Congress assembled, That every railroad company in the United States whose road is operated by steam, its successors and assigns be and hereby is authorized to carry upon and over its connections, boats, bridges and ferries all passengers, troops, Government supplies, mails, freight and property, on their way from any State to another State, and to receive compensation therefor.

Mr. O'Neill appealed to Mr. Washburne not to press this bill to a vote, hut to refer it to the Committee on Judiciary. The bill involved many questions of magnitude to the country and also of constitutional law. Let it go over the holidays in order to give full time for examination.

Mr. Washburne replied he was a little surprised the gentleman should distrust the legal ability of the Committee on Commerce. The Judiciary Committee during the last Congress reported the bill introduced this morning, word for word, and on the 12th of May, 1864, passed it. He kuew of no railroad interest which would control the actiou of this House. It was a question as to whether Congress has the right to provide free intercourse among the several States. No passage in the President's Message was more approved than this. If the House desired discussion on the bill, they must vote down the previous question.

Mr. Garfield said he introduced a similar bill early in the last session. It was a plain declaration that Congress has the right to regulate commerce among the States. This was clearly within the scope of Congress. He supposed the House had already sufficient informatoin to enable them to act upon it intelligently, and therefore hoped there would be no postponement.

John L. Thomas (Md.) did not rise for the purpose of defending any railroad in Maryland or elsewhere. In Committee he voted against reporting the bill, for the reason that it was not a question proper for the Committee on Commerce, but should be examined by the Committee on Judiciary, as constitutional questions were involved in it. He had as much right to be heard as any other member. This was a question touching the interests of his own State, and he proposed that the bill be made a special order for the 10th of January.

Mr. Rogers said the main object of the bill was to strike at Maryland and New Jersey. It was to deprive a chartered company of New Jersey of a privilege granted 50 or 60 years ago, for the benefit of another company, by way of the coast. Loyal New Jersey demanded that her rights be respected.

Mr Washburne said New Jersey and Maryland taxed passengers 15 to 20 per cent., by which the people had suffered long enough; but what was now proposed was a general law, and applicable to all the States. There was nothing in the bill about Maryland and New Jersey.

Mr. Rogers remarked that the charges made by the gentlemen, though not so intended, were untrue, and these he wished to discuss, and place Maryland and New Jersey in their true attitude.

The bill was then ordered to be engrossed by a vote of 92 Yeas against 52 Nays, and then passed.

CONDITION OF THE HARBORS.

On motion of Mr. Eliot, a resolution was adopted calling on the Secretary of War to communicate to the House the present condition of the harbors of the United States where public works have been built or directed to be built; what appropriation is required for repairs on the sea coast, lakes and navigable rivers, &c.

A NEW RULE.

Mr. Washburne (Ill.), from the Select Committee on the Rules, reported a new one for the appointment of a Committee on Mines and Mining, to consist of nine members. This was agreed to.

CHICAGO AND MOBILE RAILROAD.

Mr. Allanson (Iowa) introduced a joint resolution, as frllows:

*Whereas*, Section five of an Act entitled "An act granting the right of way and making a grant of land to the States of Illinois, Mississippi and Alabama in aid of the construction of a railroad from Chicago to Mobile," approved Sept. 20, 1850, providing that if the said railroad shall not be completed within ten years the said State of Illinois shall be bound to pay to the United States the amount which may be received upon the sale of said lands by the said State, and the title of the residue of said lands shall reinvest in the United States, to have and to hold the same in the same manner as if its Act had not been passed, and

*Whereas*, Said railroad has not been completed as provided by said act, therefore

*Resolved*, That the Secretary of the Interior be and he is hereby directed to demand and receive from the State of Illinois the proceeds derived from the sales of said lands granted by said act.

*Be it further resolved*, That the Secretary of the Interior be and he is hereby directed to ascertain what portion of said lands remained unsold on the 21st day of September, 1860; and he is further directed to sell such remainder in the same manner and upon the terms now provided by law for the sale and disposition of the public lands belonging to the United States.

The resolutions were referred to the Committee on the Judiciary.

BRIDGING THE MISSISSIPPI.

Mr. Harding (Ill.) introduced a bill, which was referred, providing that any railway bridge across the Mississippi River at Quincy, Illinois, constructed so as not to obstruct navigation and in accordance with the jurisdiction of the Supreme Court, is declared a highway of commerce among the States and a post-route of the United States, and until the bridge is constructed a ferry at that point is authorized as a highway and post-route.

NAVAL DEPOT AT GRAND HAVEN.

Mr. Ferry (Mich.) introduced a bill to establish a naval yard and depot at Grand Haven in Michigan, appropriating $100,000 for such purpose. Referred to the Committee on Naval Affairs.

THE PACIFIC RAILROAD.

On motion of Mr. Hubbard, of Iowa, it was resolved that the Committee on the Pacific Railrnad he instructed to inquire into the expediency of providing by law so far as necessary, on the part of Congress for the appointment of one or more Government directors in the companies organized for the construction of branches of the Pacific Railroad.

SURVEY OF THE MISSISSIPPI.

On motion of Mr. Blow it was resolved that the Committee on Commerce be instructed to inquire into the expediency of a survey of the Mississippi River and its tributaries with a view to the improvement of the same, and of other navigable streams, and whether the United States Coast Survey cannot make said survey, and that they report by bill or otherwise.

NAVY YARD ON THE MISSISSIPPI.

On motion of Mr. Blow it was resolved that the Committee on Naval Affairs he instructed to inquire into the expediency of establishing a Navy-Yard on the Mississippi River or one of its tributaries, in accordance with the recommendation of the same under a joint resolution of June 30, 1864, to report by bill or otherwise.

NEW RAILROAD TO WASHINGTON.

On motion of Mr. Sloan (Wisconsin), the Committee on Roads and Canals was instructed to inquire whether persons visiting the National capital are subject to any unnecessary inconveniences or obstacles in passing through the city of Baltimore, and to report to this House at an early day whether it would he just and expedient to authorize the Northern Central Railroad Company, of Pennsylvania, to extend their road to this city.

---

FLORIDA RAILROADS.—The railroads in Florida did not suffer much damage during the war, in comparison to other Southern roads. The Pensacola and Georgia road is in fair running order from Quincy to Lake City. The cars are running tri-weekly. On the Central road the cars make their weekly trips between Lake City and Jacksonville. The Florida Railroad from Fernandina to Cedar Keys, it is expected, will he in operation by the first of January. The Pensacola and Georgia Railroad runs no further west than Quincy, although it is hoped it will be completed before long to Chattahooche.

### Mails on Railroads.

The Postmaster General has issued the following circular to railroad managers:

It is known to you that the mail service on the railroads generally, during last winter, was so irregularly performed as to seriously delay the transmission of the mails. Various causes were assigned for the failures, hut the principal one was the great length of trains, that made it impossible for them to make their schedule time. No satisfactory reason for this was given to this Department or the public. The compensation for carrying the mails is remunerative for the railroad companies, and their obligation is clearly to convey them according to their most expeditious schedules whatever may be the delay to their passenger or freight traffic.

The interest of the public in the regular and speedy transmission of the mails is superior to the private interests of railroad companies, and the delaying of the mails hy overburdened trains is virtually a violation of the implied contracts of the companies with this Department. The remedy is with the companies. Lessen the number of cars on the mail trains, especially on those carrying the through mails, to the maximum that will not necessarily prevent the schedule time being regularly made, and the difficulty will be removed. The request now made for you to do so, is in no sense unreasonable, but demanded alike for the interest of the Government and the public, while your faithful compliance will only be the proper observance of your contract with the Department. I trust your company will heartily cooperate with the Department in its earnest desire to furnish the mails regularly and expeditiously to the public.

Respectfully,
W. DENNISON,
Postmaster General.

### Southern Railway Restoration.

The Secretary of War says:

"Over seventeen hundred miles of military railroad, operated for the Department by twenty-three thousand seven hundred workmen and agents, at a monthly cost of one and a half millions of dollars, have been restored to their former owners, and the number of persons employed in completing the accounts, in taking care of and disposing of the railroad property not yet sold or transferred, has been reduced to less than five hundred, the rest having been discharged.

"The rolling-mill at Chattanooga, its product, and the scrap iron there collected have been sold; the mill for one hundred and seventy-five thousand dollars, the rolled iron for two hundred thousand dollars, and the old iron for about one hundred thousand dollars.

"Eighty-three engines and one thousand and nine cars have been sold for a million and a half of dollars. Over two hundred locomotives and two thousand cars have been sold at appraised values, on credit, to the Southern railroads."

A Cincinnatian offered the Government $20,000 for this mill, some time since. Five hundred men are now employed in it night and day, re-rolling rails.

---

The New Lisbon, Ohio, *Patriot* says the engineers who have been surveying the Old Peacock road, reached New Lisbon, Tuesday noon. They are in the employ of the South Western Railroad Company. They report favorably of the route and express the opinion that the road will he built.

### Covington & Ohio Railroad.

We are gratified to learn that there is a very good prospect of this important road being undertaken, and completed, in a few years, to the Ohio river. Governor Peirpoint, of Richmond, writes to a citizen of this place that certain New York capitalists are about concluding a contract for the completion of this railroad to the Ohio river, upon these terms, to wit: the State of Virginia transferring to these capitalists the three millions of stock held in this road, and West Virginia giving the right of way, under the old charter of the Covington & Ohio Railroad Company.

Gov. Peirpoint is very sanguine about this enterprise, of such vast importance both to the East and West Virginia, being soon undertaken and speedily finished. And when completed it will have advantage over all other railroads, over which the trade and travel of the Mississippi valley seek the cities on the Atlantic coast. It will have the advantage in climate, during the winter, over all roads north of it. It will likewise have the advantage in grade over all other roads which ascend and descend the Alleghany mountains. The ascending maximum grade, going East being only twenty-nine feet to the mile, and the descending maximum being only sixty feet, whilst the maximum grade on the Baltimore and Ohio railroad is as much as one hundred and sixteen feet to the mile. Furthermore, between Point Pleasant and Norfolk, there is only one ascent and one descent, so well has the road been located; and this can he said of no other road crossing the mountains between the Ohio river and the Atlantic seahoard. And most important of all, this railroad will be the shortest route between Cincinnati and New York city. It will constitute the shortest route for the trade of Louisville, Cincinnati and the Great West, seeking a market on the Atlantic coast, whether it will he New York, Philadelphia, Baltimore, Norfolk, or Charleston, South Carolina.

### The South-west Branch of the Pacific Railroad.

The sale of the South-west Branch of the Pacific Railroad will he ordered, douhtless, hy the Legislature, as soon as the hill, already passed the House, and pending in the Senate, can be passed through. It turns out that the Railroad Company, the nominal owners of the road, are indifferent to the proposed sale. The hranch from Franklin to Rolla does not now pay its running expenses, and the Company state that they can not finish it with the means at their command. Nothing has been heard lately from the Dickinson-Fremont interest in this Road, which, it will be remembered, is the first link in the grand line it is proposed to run through to Texas. The Railroad Company have mortgaged the lands in the South-west for $10,000,000, and it becomes a knotty question how the lands can be sold, with this mortgage hanging over them, Of course the mortgage did not sell for par, and the money was spent on the main line. The bill before the Legislature provides for a peremptory sale, and it will turn out, probably, that somebody will make a handsome thing by the sale. The Governor is to control the matter, nominally, for the best interests of the State.—*St. Louis Republican.*

---

DEFAULTING CONTRACTORS.—The contractors on the railway between Oberlin and Elyria, O., decamped last week, owing from $20,000 to $25,000 to their employers.

### The East Pennsylvania Railroad Added to the Philadelphia and Reading Railroad System.

A majority of the capital shares of the East Pennsylvania Railroad Company are now in the custody and ownership of the Philadelphia and Reading Railroad Company. The charter of the East Pennsylvania Railroad covers the ground from the Schuylkill river at Reading to the Delaware river at Easton. The road has been in operation several years from Reading to Allentown, a distance of 36 miles.

The East Pennsylvania Railroad and the Lebanon Valley Branch jointly give the Philadelphia and Reading Railroad Company ninety miles of road coursing the great valley which lies between the South and the Blue Mountains, from the Susquehanna river to the Lehigh river, and reaching out east and west from the main trunk at Reading, on the Schuylkill river.

The Philadelphia and Reading Railroad Company now own and operate three separate roads to the Susquehanna river, to wit: The Schuylkill and Susquehanna Railroad, from Auburn on the Philadelphia and Reading Railroad to Roekville on the Pennsylvania Railroad..... 54 miles.
Lebanon Valley Braneh, Reading and Harrisburg..... 54 "
Reading & Columbia R. R., Columbia to Sinking Spring on Lebauon Valley Braneh 6 miles from Reading..... 40 "

Between the Schuylkill and the Lehigh it owns the East Pennsylvania Railroad, and is surveying the Perkiomen route; whilst in the coal region it has branehes to the eollieries in all direetions.

### Cotton Mannfaetories.

Statisties in the Interior Department, says the Philadelphia *Press*, show the nnmber of cotton manufacturing establishments in the United States, in 1860, to have been 1,091. The aggregate amount of capital invested was $97,585,269, being an inerease of $22,552,691, or 29.6 per cent. over the total eapital of 1850. The quantity of eotton consumed (exclusive of 15,200,061 ponnds wroaght into mixed fabrics of eotton and wool) was 422,704,975 pounds, equivalent to 1,656 bales of 400 pounds each, which was 250,177,975 pounds, 55.5 per cent., in excess of the consumption of 1850. The total cost of raw material was $57,285.534, and of labor, $23,949,108. The average number of male hands employed throughout the year was 46,859, and of females, 75,169. The aggregate number of spindles in operation was 5,235,727, and of looms, 126,313.

The total valuc of all kinds of eotton goods manufactured was $115,681,774. The produet of eotton eloth, including 271,859,000 yards of printed eloth, amounted to 1,148,252,406 yards, the quantity of yarn and thread to 47,241,603 pounds, and of bats, wieking and wadding to 12,967,956 pounds. In addition to the foregoing, the product embraces a large aggregate of miseellaneous articles and fabrics, among which were the following: Coverlets, 11,590; table cloths and eounterpanes, 11,600; quilts, 122,000; mosquito netting, 1,582,400 yards; cotton eordage, lines, &e., 4,876,277 pounds; webbing, 450,000 pounds; quilts, 195,391 pounds; seamless bags, 6,235,600. The number of yards of sheetings, shirtings, printed eloth, &c., amounted to thirty six and a quarter yards *per capita* for the total population of the Union.

### Another Railroad Project.

A movement is on foot in Chieago for the eonstruction of another railroad to Lake Superior. A charter was obtained of the Illinois legislature, at its last session, for the Northern Railroad to run from Chieago to the state line near Riehmond or Genoa, where it is to eonnect with the Chieago & Lake Superior Road, formerly known as the Wisconsin Central Road. This road is to run through Elkhorn, Whitewater, Jefferson, Columbus and Portage City, and thenee direet to Bayfield, on Lake Superior. Some forty miles of this road, from the State line, is graded. So that when the Chieago end, or the Northern Road, is built, they can lay the rail to Jeffersou, whieh will give Chicago a route from the point some twenty miles nearer than by the Northern Road. The "Northern Road" should not be eonfounded with the "Northwestern." It is, as we understand it, a line conneeting Chicago with the Raeine and Mississippi Road.

### Manufacture of Railroad Iron.

The product of the Rolling Mills making railroad rails in the United States, for 1864, was as follows:

| States. | No. Mills. | Total tons made. | Present capacity. |
|---|---|---|---|
| Massaebusetts | 2 | 30,312 | 37,000 |
| New York | 5 | 57,433 | 98,000 |
| New Jersey | 1 | 11,687 | 12,000 |
| Pennsylvania | 14 | 159,610 | 348,000 |
| Maryland | 2 | 5,488 | 29,000 |
| West Virginia | 2 | 844 | 18,000 |
| Ohio | 3 | 20,301 | 36,000 |
| Kentueky | 2 | 4,411 | 26,000 |
| Indiana | 1 | 12,773 | 30,000 |
| Illinois | 3 | 26,880 | 80,000 |
| Michigan | 1 | 5,600 | 20,000 |
| Missouri | 1 | — | 10,000 |
| Tennessee | 1 | — | 9,000 |
| Georgia | 1 | — | 9,000 |
| Total | 39 | 335,369 | 732,000 |

### Directors of the Tennessee & Virginia Railroad.

From the Chattanooga Gazette, December 15.

At the regular meeting in Knoxville of this company, on the 30th, the following gentlemen were elected as Direetors of the company for the ensuing year:

John R. Branner, William Galbraith, John Talbott, E. A. Sawyers, of Jefferson county; Ephraim Davis, N. W. Earnest, of Greene county; S B. Cunningham, George W. Tilford, Peter Reeves, G. W. Nelson, of Washington county; Andrew Shell, John H. Fain, of Sullivan county; Perez Diekson, A. G. Jackson, of Knox county; W. C. Kyle, of Hawkins county.

The Board was organized by eleeting John R. Branner, President, and James B. Hoxsie, Superintendent.

George Franeis Train stated in a recent leeture at Chicago, that he was about to go out to build a hundred eottages at Omaha, at the terminus of the Pacific Railroad, and initiate an enterprise in the Far West, which would make a hundred Girards and Astors of the Chieago eapitalists, would they invest money in it.

☞ Mount Olympus, the seat of the gods, is now being excavated for eoal at two and a half dollars per ton.

### Our Mineral Wealth.

The following letter has been addressed to us by one of our subscribers, who seems to be well posted in mining matters. We trust his present communieation may be followed by many others:

*To the Editor of the Stockholder:*—Reading the notes and estimates of the gold production of the Pacific States, made by Samuel Bowles, Esq., and published in your valuable paper of this week, I am inclined to say a few words in regard to the produet of gold in the State of California. The enormous riehes of the plaeer-mines which were first diseovered in California eoncentrated all the labor within the boundaries of that State, until the rush of immigration covered the grounds, and all the easy work of washing gold from dirt had been done. The deposits of gold in the gulehes and river beds were quiekly taken out, and the miners pushed on, looking for more grounds. In this way Nevada was populated, and many a man lost his "pile" of gold in his attempt to work the silver ledges of Nevada.

The discoveries of silver in Nevada created an exeitement we all remember. In California the effeet was startling. For a time even the eity of San Franeiseo seemed to be on the downward traek, and, throughout the State, villages were deserted and paying mines abandoned. No life had been given to mining enterprises by the introduetion of Eastern capital. The miners themselves packed and carried their gold-dust home to the States, or spent the proceeds in the eity. But a year sinee a very marked ehange took place. Washoe miners began to return to the gold-quartz ledges that had not tempted them in early days, when maehinery was expensive, transportation high, and labor diffieult to seeure at any price. On these quartz ledges the miner now finds it possible to work with a moderate capital, iu a climate mild and attraetive, where, even at the door of his mine, he can enjoy his home and his family.

Mr. Bowles seleeted an unfortunate spot for his studies—the Mariposa estate, famous for nothing but the ruin of a fine property by Eastern speculators, an unwieldy corporation, ever in debt to support an expensive management and to pay for endless litigations. The writer has examined with eare this range of gold ledges, from the Mariposa north, some hundreds of miles to Indian Valley. The thrift of some of the mining towns on this range speaks well for the profit of quartz-mining and for the future yield of gold. Mills are going up in every direetion. The capital has been either taken from the miners themselves or ealled from San Franciseo. As yet Eastern eapitalists are not to any extent interested in this work. Mariposa has given them all the stocks they want in gold mines. Slowly but surely the work is progressing, and the yield of gold from the quartz mines of California will soon be equal to the most prosperous years of plaeer mining.

Spending a few days at Sonora, near the eenter of the State, the writer visited, in the range of six miles, ten mills, six of them just going into operation; and within half a mile of the town, he was shown quartz enough to furnish a supply for a dozen mills for years. On Bald Mountain—a mountain which rises seven hundred feet above the town—squads of miners are at work erushing the rich quartz in hand-mortars; and on the Sell & Martin mine, fifteen hundred tons of quartz have accumulated—suffieient to pay for a fine mill. At Angelo, Columbia, Grass Valley, and on

the North, every mill is now busy, and in the course of another year the crushing capacity will be doubled throughout the State.

Millions of capital have been invested in the production of silver, and only during the past two years attention has been turned to those gold mines. The inducement to invest in gold mines has not been sufficiently attractive to Eastern capitalists. A project to raise two or three hundred thousand dollars for expensive silver-mining would secure attention, while the little help needed to develop the gold would not gain an attentive ear.

The abundance of mines in San Francisco and the comparatively low rates of interest have enhanced the value of California quartz mines more than one hundred per cent. since last spring. In Tuolumne county, near Sonora, some twenty mines have been purchased by San Francisco capitalists, and mills are under contract. One mine—the Gibson—has been purchased by John Wyeth & Co., of Philadelphia, who intend to work it on private account; and all the claims on Bald Mountain have changed hands. At Grass Valley, every foot of ground is taken, and the production increases one hundred per cent. each year.

The gross production of gold in California will soon exceed that of all the Territories on the Pacific coast; and no one who has looked in and down Hayward's gold mines, now worked at a depth of over one thousand feet, can doubt the permanency of the mines. The business is, as before stated, rapidly changing. As families grow up, the miner naturally looks about for a settled home: he finds it in California; and, as a result, wages are lower; gardens and fields are cultivated; schools, churches, and a good social order may be found, and the business becomes regular and not speculative.

It is not the object of the writer to place any mining enterprise before the public; but having spent two years in the mines, and feeling an interest in the growth of that noble State, California—rich in gold, in fertile valleys, and in all the natural advantages possessed by any, almost every State in the Union, and offering so great inducements for the poor man and the industrious miner—he would say to Eastern men: Look at the California quartz mines, or suspend judgment on various sections one year longer, till the quartz mines speak for themselves.—*Stockholder.*

### Ride in a Pneumatic Railroad Tube.

A London paper contains an account of the recent opening of a pneumatic line of railway from the General Post-office to the London & Northwestern Railroad, and the passage through the tube of several gentlemen who were anxious for a new sensation. Due preparations were made, and against many remonstrances the party determined to go. The account of the expedition says:

The first sensation at starting, and still more so upon arriving, was certainly not agreeable. For about a quarter of a minute in each case there was a pressure upon the ears suggestive of diving bell experience, a suction like that with which one is drawn under a wave, and a cold draft of wind upon the eyes, having almost the effect of falling water; but once fairly within the tube, these sensations were got rid of, or left behind, and the motion had little positive discomfort about it. It was a curious sensation to be flying along through the earth, feet foremost, in utter darkness, for the best part of ten minutes, which, in such a place seemed half an hour.

Various experiments having been tried with [illegible] and its powers of suction, one of the [illegible] at last determined to see what would [illegible] in case the train stuck fast at any point on [illegible] journey. A carriage was accordingly [illegible]ched," or fasteued in such a way that it [illegible] not move, and then the power of the [illegible] was exerted to the utmost. The carriage was intended for passengers and furnished accordingly. By and by one of the cushions, the others, and finally all the movables which the carriage contained, were hauled through the tube and delivered at the other end, the force exerted being such that even the nails keeping down the carpet were extracted. The air within the tubes was by no means either foul or disagreeable. Finally the party reached the end of their journey in safety.

### Utilization of Sewage.

The sewage of London amounts in bulk to 220,052,440 tons per annum. Subjected to the analysis of the laboratory, it is found to be rich in ammonia, potash and phosphates. And when compared, as to its composition, with the foreign fertilizers, it has been ascertained that twenty tons produce the same results, when applied to the soil, as sixteen tons of Peruvian guano. The "Coal, Corn and Finance Committee" of London, recently appointed a commission to investigate the matter, and their report, replete with valuable information, has been published.

At Rugby, with a population of about eight thousand, the flow of the drains has been economized for eleven years, and though there was a great expense in pumps, etc., the proceeds netted £50 to the town.

At Croydon the corporation is represented as leasing lands at £4, applying the sewage, and then subletting at £5 per acre, thus securing £250 per annum by this operation. In Edinburg the municipal government has made no attempt to profit by the use of the sewage, but has, nevertheless, permitted a portion of the flow of the sewers to be diverted so as to wash land on the outskirts of the city. The result has been that on a soil where the plow formerly turned up a furrow of clear sand, and which was so sterile that it rented for 2*s.* 10*d.* the Scotch acre, there is now yearly cut a crop of hay and grass worth £30 per acre.

In view of these remarkable facts, the commission have not hesitated to assert that the drains of London annually discharge into the Thames, fertilizing material worth to the agriculturists, and indirectly to the nation, the enormous sum of £2,800,000.

Huron and Ontario Ship Canal.—An additional survey of the route of the proposed Huron and Ontario Ship Canal, accompanied with numerous borings on the ridge through which a cut of more than one hundred feet is to be made, has demonstrated that that work can be accomplished with less expense than was at first supposed. No rock was found in the ridge, and the earth was ascertained to be of such a nature as to render the work upon the cut comparatively easy. This ridge, which is in the neighborhood of Lake Simcoe, is the only formidable obstacle to the speedy completion of this much desired improvement, which will connect Lake Huron with Lake Ontario by a water-course of sufficient capacity to float the largest vessels that now navigate those inland seas, and reduce the distance to about one hundred miles.

### Railroad on the West Bank of the Hudson River.

Movements are on foot which will in a comparatively short time insure an unbroken railroad line between New York and Albany on the west side of the Hudson. At present the Erie communicates with Newburgh by the way of Chesterville, and this route is to be materially shortened by building the twelve miles link between Turner's and Vail's Gates, along the Western base of the Highlands, which the road proposes to do. Beyond Newburgh the line as far as Catskill is under survey, and the Albanians are moving to build a road southward from their city. Still another line between Nyack and Jersey City has already been chartered, and this work will be commenced next spring. Peter De Pew, Esq., of Nyack, is the President of this road.

### Water for Cattle on Railroads.

The cruelty of keeping cattle on long journeys without water is, we are glad to think, being gradually recognized by the public, and it is to be hoped that railway companies generally will immediately take means for providing that which every body who has studied the matter regards as a necessity. Now that our cattle are dying off by thousands from a mysterious malady, causing the price of butchers' meat to rise in the market, to the loss and injury of the working population, it is incumbent upon all engaged in the cattle traffic to take every precaution against engendering or promoting disease, and it is undoubtedly a fact that long abstinence from water on the part of cattle and sheep very much injures their condition, and predisposes them to any infectious disorder that may be raging. A short time ago we referred to a patent watering-trough, invented by Mr. Reid, of Granton, intended to be attached to the cattle trucks now in use. Since that time we have seen another method, suggested by Mr. Dean also of Granton. Mr. Dean's idea is to have troughs at various stations, suspended from davits fixed on the six feet way, after the fashion in which boats are hung from the ship's sides. By means of these davits the troughs could be turned to any side, so as to enable cattle on either the up or the down line to drink out of them. The plan is ingenious enough, though Mr. Reid's appears to possess several advantages over it; but the adoption of either, by railway companies, would do away with much unconscious cruelty to animals, and would be the means of saving considerable sums of money annually to breeders and feeders of stock.—*Scotsman.*

Boston Railroad Dividends.—The semi-annual dividends of the railroads running out of Boston have nearly all been declared, and show that the companies have been doing a large business during the year 1865. The Boston & Worcester leads with five and a half per cent, making ten per cent. for the year. The Boston & Providence will pay out five per cent. The Boston & Lowell, Boston & Maine, and Old Colony, all pay four per cent. The Eastern & Fitchburg have not yet declared. The former will probably divide three per cent., taking a portion of its large earnings this year to cancel part of its debt, which, under the present excellent management of the road, is fast melting away. The Western Railroad will probably declare a dividend of five per cent.

### Smuggling on the Lake Border.

Very few people not in official positions are aware of the amount of smuggling constantly accomplished on the chain of great lakes. It is known that at Detroit, where the river affords quick access to the Canada shore, not less than $10,000 worth of goods elude the vigilance of the custom officers every day. There is scarcely a small port that is not, during the season of navigation, a landing-point for smuggled goods; and every sheltered beach is used for the same purpose. These operations vary in magnitude, from a suit of clothing to thousands of dollars' worth of dutiable articles. Clothing is bought in Canada, and worn by the buyer, when he recrosses into the United States. To get over articles in larger quantities there are many shrewd devices, and the smugglers are confident in their success.

Not long since a Canadian merchant boldly stated, to a custom officer of this city, that a dozen barrels of whiskey were to be smuggled from a port which he named, the following week. He was willing to tell them that, and yet take the risk. The whiskey, undoubtedly, was shipped from Canada on a vessel which brought it to a convenient locality near the American shore, and then transferred it to some small craft, to be run into an unfrequented port under a load of wood. Then the first vessel with the balance of her cargo, would enter another port, and nothing wrong be found on her.

The authorities in this city have been indefatigable in their efforts to punish these offenses, and have succeeded quite as well as is possible with the facilities at hand. Without doubt, the same vigilance is exercised at other points, but nothing less than a man to watch every mile of beach, and every vessel from the time she enters a port until she leaves, can prevent all this illegitimate business. With the present revenue force, the operations can not be controlled. It is stated the Government detective force is to be sent along the border. They will find enough to occupy their attention, and it would seem profitably, if they save to the Government the large amount of revenue now lost by these smugglers.

### English Railway Statistics.

A Parliamentary return furnishes some interesting statistics regarding the railroads of Great Britain. By the reports, it appears that there were 12,789 miles of railway open in the United Kingdom in 1864, as compared with 12,322½ miles the year before. Of this 12,789 miles, 7,402 were double and 5,387 single lines of rail. As many as 222,272,165 persons traveled on these lines during the year 1864, as against upward of 204,500,000 during 1863. This is exclusive of season and periodical ticket holders, of whom there were 76,490 during 1864, and 64,391 during 1863. The following were some of the items composing the traffic of 1864:

| | |
|---|---|
| First class passengers | 27,701,415 |
| Second class " | 65,269,169 |
| Third class " | 136,301,581 |
| Number of carriages carried | 66,702 |
| Horses | 283,112 |
| Dogs | 459,494 |
| Cattle | 2,993,357 |
| Sheep | 8,455,681 |
| Pigs | 2,224,748 |
| Coal, coke & other minerals, tons | 75,445,881 |
| General merchandise, tons | 35,914,914 |

The number of trains run was 4,969,969. About three-eighths of these were luggage trains. Altogether they traveled 129,130,943 miles. The passenger trains traveled 66,555,219 miles: the goods trains four million miles less. The total receipts from all sources of traffic amounted to £34,015,564—an increase of almost three millions on the year 1863. First class passengers contributed £3,601,530 to this; and second class travelers, £4,545,472, and third class, £5,375,048. Season ticket holders contributed £393,550. The receipts on account of excess of luggage, carriages, &c., amounted to £1,210,099, and the receipts from mails, £558,341. The carriage of live stock produced £684,945; of coal and minerals, £6,302,888, and of general merchandise, £11,343,671. The increase of receipts seems to have been general, and is not confined to any particular class of revenue. In no class is there a decrease observable in the receipts for 1864 as compared with 1863.—*N. Y. Herald*

### A New "Iron Mountain."

The iron mountain of Missouri, situated some eighty miles west of south from St. Louis, has long excited the wonder and admiration of metallurgists and commercial men. It is doubtless the greatest development of rich iron ore, above the surface and "patent to the eye," in the known world. Wealthy capitalists, years ago, monopolized this great bed and mound of ferruginous tresure, and are profiting from its product. The ores from the iron mountain are transported to places at a distance, where mineral and charcoals are cheaper, for manufacture, and furnaces in its neighborhood are employed in reducing them to pigs. Our readers all know of the Pilot Knob and Iron Mountain District of Missouri.

A gentleman who recently visited East Tennessee, has described to us a new mountain of iron ore recently discovered in that State. It is in the southern part of Roane county, three miles east of the Tennessee river, and sixty north of Chattanooga. This placer consists of a hill of iron ore of the kind known as specular lenticular, hematite ore; familarly called "dyestone ore" by the Tennesseeans. The emience is divided into three spurs, or offshoots, each of which has a broad top covered by solid beds of ore. The exact thickness of these beds is unknown, but is pronounced at least twenty-five feet from outcropping crags, and may be treble that depth. The surface of the hill extends over two hundred acres. The finest timber grows upon the property and in the neighborhood. Prof. Safford, Tennessee State Geologist, says the dyestone ore yields seventy per cent, of iron, by a nice analysis, though in practical working it would not produce over sixty. This ore is unusually "kind" in fluxing, and makes a soft gray iron. There are two other similiar developments in the same district and all of them will be brought within convenient distance of Cincinnati by the construction of the proposed Southern railroads.—*Cin. Gazette.*

### Seeing through Water.

The Edinburg *Review* says: "Currents in the very bed of the river, or beneath the surface of the sea, may be watched, as Mr. Campbell informs us, by an arrangement that smugglers used in old days. They sunk their contraband cargo when there was an alarm, and they searched for it again by the help of a so-called marine telescope. It was nothing more than a cask with a plate of strong glass at the bottom. The man plunged the close end a few inches below the surface, and put his head into the other end and then he saw clearly into the water. The glare and confused reflections and refraction from and through the rippled surface of the sea were entirely shut out by the contrivance. Seal hunters still use it. With this simple apparatus the stirring life of the sea bottom can be watched at leisure and with great distinctness. "So far as this contrivance enables men to see the land under the waves movements under water closely resemble movements under air. Sea weeds, like plants, bend before the gale; fish like birds, keep their head to the stream, and hang poised on their fins; mud clouds take the shape of water clouds in the air; impede light, cast shadows, and takes shapes which point out the directions in which currents flow. It is strange at first to hang over a boat's side peering into a new world, and the interest grows. There is excitement in watching big fish swoop like hawks out of their sea weed forest after a white fly sunk to the treetops to tempt them, and the fight that follows is better fun when plainly seen." Mr. Campbell suggested plate-glass windows in the bottom of a boat; it would bring men and fish face to face; and the habits of the latter could be leisurely watched.

### Douglass' Rail-Joint.

There was a rail joint exhibited at the late fair of the American Institute which we did not notice at the time, although we intended to do so. It is the invention of Aaron Douglass, of Paterson, N. J. It is a looking joint, and seems at first as if it would be difficult to take up rails so jointed; but we are assured that it has been tried with a view to test this difficulty, and that it is by no means serious—not, on the whole, more troublesome to take up and relay than ordinary rails that rest in chairs. The joint has a slight resemblance to Hilliard's, which was tried on the Erie Railway, and found to have advantages as to durability, but was in other respects unsatisfactory; and this joint is designed to remedy the defects of Hilliard's. The two ends interlock in such a way that they have no tendency to be displaced vertically, but may, with some skill and pains, be readily separated by a lateral movement, when the spikes are drawn. The cost of the joint it is estimated will be less than the cost of a chair, and no chair will be required. In making the joint the ends of the rail will be compressed, and thereby hardened and rendered more durable than the ends as they come from the rollers. We think this joint may be worthy of the attention of railway superintendents.—*Ama. Artisn.*

Connection with the Ohio River.—The Kanawha (Charleston) Republican has the following paragraph in reference to the two great works by which it is proposed to open communication from the Ohio river to the Atlantic ocean:

James River and Kanawha Canal.—We publish an editorial from the Richmond Whig about the proposed improvement of the James River and Kanawha navigation. The editor is mistaken in supposing there is, in this valley, opposition to this great water line improvement being made. Many persons in this section have had no faith in the ability of Messrs. Bellot des Miniers & Co. carrying out their grand plan of connecting the waters of the Ohio with the waters of the Chesapeake, but are highly gratified to see this scheme is now attracted the attention of capitalists in Europe, and will give their cordial co-operation to the scheme.

### The Railroad Interests of a City.

When a municipality rises to greatness from the development of natural advantages, its aggregated interests can best be promoted by rival lines independent of each other, leading into the interior country. Because a railroad that occupies good ground can command business ample to earn interest and dividends on the money invested in it; and hence competition for interior trade, distant from a terminus of a company's line, tends to diminish cost of transportation, and thereby opens up opportunity for enlargement and extension of commercial transactions. The interests of a city are not identified solely with its small percentage of stockholders as such, but rather with its sales and manufactures, the profits on its sales and the labor on its manufactures jointly making up the bulk of its gains, out of which the masses are subsisted and opulence acquired. The seven hundred thousand inhabitants of Philadelphia need increase of carrying facilities by sea and land, corresponding with the enlarged scale of operations between the city and its markets. The carrying lines which sufficed for a city of half a million of indwellers are inadequate for a city of three-quarters of a million of people blessed with the elements of aggregation, expansion, and opulence.—*U. S. Railroad and Mining Register.*

### Gas in India.

The natives of Bombay, India, are much excited by the operation of lighting the streets by gas, just introduced there. Long before the lamps are lighted on an evening, numbers of natives may be seen grouping round every lamp post, and when the lamplighter approaches, (followed by a ragamuffin crowd,) the greatest excitement prevails, the strongest pushing the weakest in their endeavor to secure the best possible place. After a little preliminary chaffing the lighter ascends the ladder, and when the illumination is complete the mob heave a sigh of relief and quickly sit down at the foot of the post, and with upturned faces gaze upon the lamp for hours, while every now and then they clasp the post with their hands to feel whether it gets hot. The mystery why the post does not get hot they can not solve, and they argue for hours together upon the ins and outs of the question, until finally, tired out, they return to their homes to dream of the wonders produced by "Sahib."

New Lines of Railroad.—Three new lines of railroad, extending through the counties of Montgomery, Chester and Berks, are likely to be built next year—the Perkiomen railroad, connecting with the Reading railroad near Pawling's Bridge, and with the Auburn railroad in Lehigh county; the Colebrookdale railroad, connecting with the Reading railroad at Pottstown, and running away to Boyertown to the Rock Mines, Berks county, and connecting with the Catasaqua and Fogelsville railroad, and the Berks and Chester railroad, which is to connect with the Reading railroad at Birdsboro', Berks county, and running by way of Downington, Chester county, to New Castle, Delaware. The routes of all these proposed lines have been surveyed, and one or two, if not all three, will be put under contract next spring. They will pass through districts that will furnish a heavy local trade, and will be important feeders to the Philadelphia and Reading road.—*Montgomery County Ledger.*

### RAILROAD ITEMS.

It is stated that at the recent meeting of the Toledo, Logansport & Burlington railroad, that corporation passed into the hands of the Pennsylvania Central. Arrangements have been made between this road and the Chicago & Great Eastern Railway, for a joint crossing of the Wabash river at Logansport. The building of the road from Peoria, Illinois, to the Mississippi river, was put under contract on the 28th ultimo. The line from Logansport to Union City will be completed about the 1st of January. The road is designed to connect at Burlington, Iowa, with the Burlington and Missouri river railroad.

La Crosse & Milwaukee Railroad.—This railroad and premises, which are mortgaged to secure the payment of the second mortgage bonds, is advertised to be sold on the 4th of January next.

A committee, on the part of the Milwaukee and St. Paul Railroad Company, has been appointed to purchase said property, and have already received nearly a million of the bonds for this purpose.

Milton Ball, of Canton, Ohio, has invented a new railroad switch, designed to avoid accidents by carelessness in leaving switches open. The lever is enclosed by a fence, the door or gate of which is attached to the lever. Opening the door closes the switch, and shutting the door opens the switch. The idea is that the tender, passing inside as he opens the switch, can not go out again without closing the switch by opening the door.

The North Missouri Railroad have had built at Jeffersonville, Indiana, a ferry-boat to be used by the railroad company at the crossing of the Missouri River at St. Charles. The boat is very large and unusually long, with inlets through the center from end to end, with a railroad track laid, on which an entire train, locomotives, cars and all, run from the track on shore, and are thus conveyed across the river to the track on the other side, thus obviating all changing of cars, baggage, freight or passengers.

To put an end to the continual delays on railways, the Council of State in Switzerland has just resolved to impose the following fines:—"A delay from a quarter to half an hour, fifty francs; from a half to one hour, one hundred francs; from an hour to an hour and a half, three hundred francs; more than an hour and a half, five hundred francs."

The N. Y. *Times* says it is rumored that the Harlem Railroad is to connect with the Hudson River road at some point near Hudson, in order to strike the new line near Athens, to Syracuse, and so shorten the trip west. Mr. Vanderbilt and others have purchased a large tract of river front near Stockport, which evidently has a view to this important railroad connection.

The preliminary survey of the Cairo & St. Louis Railroad has been completed. The distance between the two points by the route surveyed is one hundred and thirty miles—six miles more than an air-line.

The steam whistle at the Atlantic & Great Western Railway shops, in Kent, is so powerful as to be heard for a distance of fourteen miles.

The Speaker of the House in his appointment of the new Committee on Mines and Mining, has represented the gold mines of California and Oregon, the silver mines of Nevada, lead mines of Wisconsin and Iowa, the copper mines of Michigan, iron and coal mines of Pennsylvania, and Iron Mountain Mine of Missouri.

The stockholders of the South Side (Va.) Railroad, have adopted a proposition to form a consolidation with the Virginia and Tennessee and the Norfolk and Petersburg roads. This, if carried out, would make a continuous line of railway from Bristol, Tennessee, to Norfolk, Virginia, a distance of four hundred miles.

Pacific Railroad Affairs.—A dispatch says strong efforts have been made within a few days, by interested parties, to have the Secretary of the Treasury issue United States bonds to the Pacific Railroad Company, for the alleged completion of twenty-two miles of road west from Lawrence, Kansas. Protests have also been entered against their issue, and the whole matter is now under advisement.

Among the patents lately taken out in France are a hygienic alphabet in gingerbread; a method of making head dresses, caps and pocket handkerchiefs in paper; a mechanical fan, opening and shutting instantaneously; a machine for cutting stone by means of a system of points, reproducing minutely the relief required; an apparatus for making deaf people hear; and no fewer than ten patents for stopping railway trains.

Upon a subscription of $60,000, the Little Miami Railroad Co. have agreed to build a branch from Deerfield to Lebanon. The citizens of that beautiful place are moving to secure the required amount. Warren county is one of the finest in the State, and Lebanon is the gem of Warren. We hope soon to be able to report the success of the enterprise.

Pittsburgh, Fort Wayne & Chicago R.R.—This Company has made a contract for twenty-five new engines, to cost between five and six hundred thousand dollars. The Company has, during the year, made large expenditures for construction, and has sold stock, it is stated, to the extent of a million and a quarter dollars.—*N. Y. Chronicle.*

Omaha, Tuesday, Dec. 19, 1865.

The first 40 miles of the Union Pacific Railway, Omaha, West, was finished yesterday. The track to Fremont, 8 miles further west, will be finished at the end of this week.

The Owen (Ind.) *Journal* says, "We are informed on good authority, that a company of capitalists have agreed to construct the Indianapolis & Vincennes Railroad, if the citizens along the line will donate $3,000 per mile, payable when the road is completed."

Trains on all the roads running into Chicago, except the Pittsburgh, Fort Wayne & Chicago Road, have been delayed by the recent heavy snow storms.

The night trains on the railroad from Richmond to Washington have been discontinued, on account of the frequent depredations on the track, rendering travel a matter of great danger.

A riot occurred on the Dayton & Western Railroad on the 26th, between some laborers who refused to pay their fare, and the train hands. Two of the laborers were killed, and several wounded. The baggage master was also wounded.

Engineers are now engaged in surveying a route for a railroad to connect Winona with the Milwaukee & St. Paul Railroad. It is expected to have the road completed by the first of January, 1867.

The Darlington *Union* says the railroad from Janesville to Monroe is to be continued through to Dubuque. This has been fully determined upon, we are informed.

The Atlantic & Great Western, and the Fort Wayne & Chicago Railways, are building a magnificent depot at Mansfield.

### Railroad Accidents.

John Tinsley, a brakeman on the Ohio & Mississippi Road, died at Odin on the 21st, from injuries received yesterday morning, while endeavoring to couple cars.

The paymaster's car on the Northwestern Railway came in collision with a freight train at Ridgefield, Mississippi, on the 21st, instantly killing the fireman and breaking both legs of the engineer, besides using up the locomotive.

PHILADELPHIA, Dec. 21.—This morning the passenger way train on the Philadelphia & Trenton Railroad was run into when crossing the Reading Railroad at the junction, by an engine of the latter road. Both engines and tenders were damaged, but nobody was hurt.

### PERSONAL.

ST. LOUIS, Dec. 19.

Col. John O'Fallon, who died here on Sunday, was one of the oldest and wealthiest citizens and the most public spirited and benevolent gentleman of St. Louis. Among the many munificent charities of Col. O'Fallon may be mentioned the endowment of the O'Fallon Polytechnic Institute with $100,000 worth of property; a most liberal donation to the Washington University; fifteen acres of ground to the Home of the Friendless; five acres of land on which the City Water-works are erected; the site on which the St. Louis University stands, and the building of the Dispensary and Medical College, over which Dr. Pope, his son-in law, now presides. Altogether he has bestowed about a million dollars to advancing the cause of education and science. He was also the first President of the Pacific, North Missouri, and Ohio & Mississippi Railroads. The Union Merchants' Exchange passed resolutions on Monday to drape their Chamber in mourning for thirty days, the members to attend the funeral in a body, and recommending a general suspension of business and attendance of the funeral by the people. No man was more respected or beloved.

PRESENTATION.—The local agent of the Ohio & Mississippi Railroad, Mr. Jas. R. Webster, on returning from dinner yesterday, was surprised to find placed on his desk a handsome silver set, a testimonial gift from the employes of the station. It is needless to say with what feelings Mr. Webster responded to his friends for their generosity.

MARQUETTE (L. S.) MATTERS.—The *Journal* says work is rapidly progressing on the Peninsula Branch Railway. This is an extension, we believe, of the Peninsula Railway, from Negaunee to Harvey, on Lake Superior, about three miles east of Marquette.

Mr. Hurley, the contractor, had shipped a large lot of supplies and a lot of horses for that part of the Green Bay and Houghton mail route lying between Negaunee and Houghton.

CHANGE OF PROPRIETORSHIP OF THE MISSISSIPPI & MISSOURI R. R.—We learn through railroad officials that the Mississippi & Missouri Railroad will pass into the hands of the Chicago & Rock Island Railroad Company on the 1st prox. We learn with satisfaction that no changes will be made in the officers, conductors, &c., of the Mississippi & Missouri Road. Superintendent Kimball retains his position, as do also the well known conductors, McChesney, Root and Dow.

Success to the new order of things, and may tariffs come down as once did "top knots."—*Davenport Gazette.*

### MONETARY AND COMMERCIAL.

Trade is more active since Christmas, and the most interesting feature of Cincinnati markets, at this season, the hog, which has dragged so long, is now buoyant and active: It is hardly possible, after the long delay, that the packers will reach the numbers of last year; but it is hoped that the receipts will increase, and the prices diminish to a reasonable figure, for a dullness in the pork market depresses trade generally.

Exchange is in better demand, and there is a probability that currency must be ordered from the East. Gold is heavy at the reduced rate. Below will be found the quotations of Governments yesterday:

| | Buying. | Selling. |
|---|---|---|
| 5-20's, old | 103¼ | 103¾ |
| 5-20's, new | 100½ | 101 |
| 10-40's | 92¾ | 92¾@93 |
| 7-30's, August | 98 | 98⅛ |
| 7-30's, June | 97¾ | 98 |
| 7-30's, July | 97⅝ | 98 |
| Certificates | 97⅝ | |

The following were the closing quotations for exchange and coin:

| | Buying. | Selling. |
|---|---|---|
| New York | 50 dis.@par | par@50 prem |
| Philadelphia | 50 dis.@par | par@50 prem. |
| Boston | 50 dis.@par | par@50 prem. |
| Gold | 145 | 145¼@145¾ |
| Silver | 138@140 | 140@141 |

The Railway stock market is irregular and weak. We quote—

| | Tues. A. M. | Wed. P. M. |
|---|---|---|
| U. S. 6 per cent. Bonds, 1881 | 107⅛ | 107⅛ |
| " 5-20 " old | 103¼ | 103⅜ |
| " 5-20 " 1864 | 100⅞ | 101 |
| " 5-20 " 1865 | 100¾ | 101 |
| " 10-40 " | 92⅝ | 92⅝ |
| " One-year Certificates | 97⅞ | 98 |
| 7-30s, 1st series | 98⅛ | 98⅜ |
| 7-30s, 2d series | 97⅞ | 98 |
| 7-30s, 3d series | 97⅞ | 98 |
| New York Central | 95⅛ | 95⅜ |
| Erie | 94⅞ | 95⅛ |
| Hudson River | 108⅝ | 108¼ |
| Reading | 107¼ | 106⅞ |
| Michigan Central | 109⅜ | .... |
| Michigan Southern | 74⅛ | 74⅜ |
| Illinois Central | 132⅛ | 132 |
| Cleveland & Pittsburg | 84⅜ | 82½ |
| Chicago & Northwestern | 35⅛ | 35 |
| " " pref | 61¾ | 61⅛ |
| Cleveland & Toledo | 111⅛ | .... |
| Rock Island | 107⅞ | 106¾ |
| Pitts., Ft. Wayne & Chicago | 105⅜ | 105 |
| Ohio & Mississippi Certificates | 28⅝ | 28⅜ |

### Railroad Earnings.

Second Week in December—

| | 1865. | 1864. | Increase. |
|---|---|---|---|
| Detroit & Milwaukee | $28,889 | $26,728 | $2,161 |
| Grand Trunk | 131,074 | 120,470 | 10,604 |
| Michigan Southern | 81,311 | 80,765 | 916 |
| Chi. & Rock Island | 43,786 | 75,183 | *31,397 |
| Michigan Central | 76,407 | 76,344 | 63 |

* Decrease.

The Michigan Central road reports the following financial statement for the six months ending November 30, as follows:

| | | |
|---|---|---|
| Surplus income June 1, 1865 | | $ 708,385 |
| Receipts for six months, | | 2,457,806 |
| Total | | $3,166,191 |
| Less | | |
| 10 per cent. div. and taxes, July 1 | $674,441 | |
| Expenses and U. S. taxes | 1,667,864 | |
| Interest | 297,410 | |
| Sinking Fund (annual) | 84,500 | |
| Five per cent. dividend and tax | 362,141 | —2,886,356 |
| Balance surplus income | | $ 279,385 |

The operating expenses have been charged with $40,000 for grain house, $30,000 for a new freight house, and $50,000 for losses by the fire in October, which will reach $200,000 over the insurance, or 3 per cent. upon the stock.

November earnings of the Pittsburg, Fort Wayne & Chicago Railway Company.

| | 1865. | 1864. |
|---|---|---|
| From Freights | $442,042 97 | $409,844 81 |
| " Passengers | 243,592 29 | 257,553 89 |
| " Express Matter | 10,463 00 | 8,023 70 |
| " Mails | 7,825 00 | 7,825 00 |
| " Rent of Railway | 7,083 33 | 7,083 33 |
| " Miscellaneous | 1,965 04 | 1,225 04 |
| Total | $713,171 63 | $691,555 77 |
| Earnings from January 1, to November 30 | $7,821,291 57 | $6,206,383 31 |

The Michigan Central Railroad Company has declared a dividend of $5 per share, payable January 1, to holders of stock on the 20th instant.

The December earnings of the Rock Island have been, since 1860, as follows:

| | | | |
|---|---|---|---|
| 1860 | $ 75,457 | 1863 | $401,132 |
| 1861 | 118 753 | 1864 | 321,037 |
| 1862 | 135,595 | 1865 | *9,907 |

* Two weeks.

The Housatonic Railroad earned in November:

1864....$37,118 82 | 1865....$43,157 29 | Inc....$6,038 47

The following is a statement of coal transported on the Delware and Hudson Canal for the week ending December 16, 1865:

| | Week. | Season. |
|---|---|---|
| Del. and Hudson Canal Co. | 23,340 | 762,612 |
| Pennsylvania Coal Co. | .... | 41,575 |
| Total tons | 23,340 | 804,187 |
| For the same period last year: | | |
| Del. and Hudson Canal Co. | 17,335 | 848,671 |
| Pennsylvania Coal Co. | 8 736 | 501,490 |
| Total tons | 26,071 | 1,350,161 |

Statement of approximate earnings of the Marietta & Cincinnati Railroad Company, for the second week in December:

| | 1865. | 1864. |
|---|---|---|
| Passengers | $ 9,667 90 | $ 8,095 08 |
| Freight | 14,806 85 | 13,157 71 |
| Mail, Express and Telegraph | 1,185 00 | 1,079 58 |
| Total | $ 25,659 75 | $ 22,332 37 |
| Total this month to date | 51,787 25 | 41,541 05 |
| Total for the fiscal year, commencing 1st January | $1,169,217 68 | $974,904 75 |

Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

## Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M, |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city.

ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt

---

## BENJ. H. LATROBE AND C. H. LATROBE,

CIVIL ENGINEERS,

Have opened an Office in Baltimore, in the

LAW BUILDINGS,

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also, the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7-3m

---

## The Old And Reliable Route.

**Through to Pittsburg without Change.**

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

---

Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:30 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:00 A. M. | 10:40 P. M. |
| HAMILTON..... | 9:57 " | 11:43 " |
| DAYTON..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 10:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast cornor of Broadway and Front streets, and at No. 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, CHAS. COOK, } Passenger Agents.

---

## CENTRAL RAILROAD

—OF—

NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels.

640* JOSIAH O. STEARNS, Superintendent.

---

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twedty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.90; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex. 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p, m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a, m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

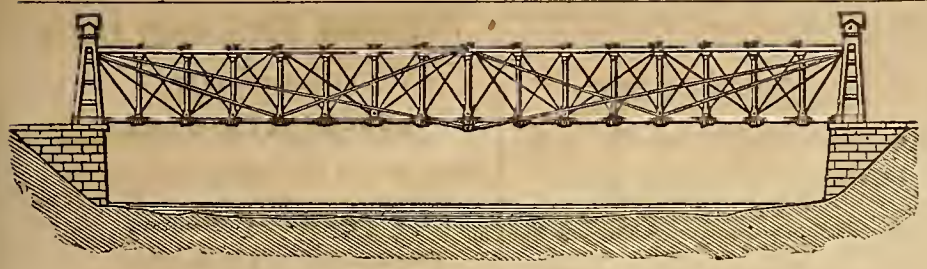
JAMES H. HOYT, Superintendent.

---

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, roy and Saratoga Springs, als connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



(*Plan of Bridge.*)

## FINK'S PATENT
## IRON RAILROAD BRIDGE.

THE undersigned is preparsd to manufacture and build in any part of the United States, and at reasonahls terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. Ths sams is favorahly known, woll tested, and already sxtensively introduced; is stronger and more economical than any other Iron Bridgs in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

## SCREW BOLTS,

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridgo Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, mads on short notics and on ths most favorahle terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those Interssted in Railroad Property, to their system of

## LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By thess means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

## KNOX & SHAIN,

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silvsr Psn and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

## FINDINGS,

AND

## MACHINERY,

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

**BUSH & LOBDELL,**

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

## Chilled Wheels and Tyres

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS sxecntsd promptly to any extent for their celebrated Wheels, either single or douhls plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the hest manner, at the shortest notice, and on tho most reasonable terms.

---

## AMERICAN BANK NOTE COMPANY.

***Bank Note Engravers & Printers.***

Also engraved in a style corresponding in excellsuce with that of Bank Notss,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Nots Paper, made to order, of supsrior quality.

The ahovs offico is undsr ths supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

## SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

## RAILWAY SPRINGS.

**FREIGHT**








**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS.

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,
54 Exchange Place, New York.

---

## W. M. F. HEWSON,

**STOCK BROKER,**

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and othsr Securities on mmission only; negotiates Loans and takes collections.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new unning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimore*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indionapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M. leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo Depart. | Arrive. |
|---|---|
| Mail | 7:20 A. M 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7.50 P. M. 11:00 P. M. |
| Lonisville, Special Train | 3:45 P. M. 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent.

W. D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place connites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other ronte.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

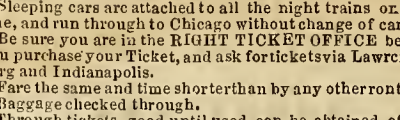
## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

## CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9.

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅛ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. H. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!



## FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P. M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M. (Express.

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON. - - - } Editors

CINCINNATI:
THURSDAY, JANUARY 4, 1866.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

W. A. MUNSELL,
*General Agent.*


## Arrival and Departure of Trains.

| | *Depart.* | *Arrive.* |
|---|---|---|
| **LITTLE MIAMI.** | | |
| Cincinnati Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4: 0 P. M. | 4:00 A. M. |
| Morrow Accommodation | 5:30 P. M. | 8:00 A. M. |
| Night Express | 7:00 P. M. | 3:50 P. M. |
| Night Express | 10:00 P. M. | 9:40 A. M. |
| **MARIETTA AND CINCINNATI.** | | |
| Mail | 5:00 A. M. | 7:30 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P. M. | 5:45 A. M. |
| **CINCINNATI, HAMILTON AND DAYTON.** | | |
| Indianapolis & Cambridge City | 7:00 A. M. | 9:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:50 P. M. |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| Dayton Accommodation | 6:35 P. M. | 9:35 P. M. |
| Dayton, Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A. M. |
| Richmond & Chicago | 5:30 P. M. | 1:20 P. M. |
| **CHICAGO & GREAT EASTERN.** | | |
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " " | 5:30 P. M. | 1:20 P. M. |
| **INDIANAPOLIS AND CINCINNATI.** | | |
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Mail & Springfield Express | 2: 0 P. M. | 4:30 P. M. |
| St Louis and Chicago Express | 7:30 P. M. | 1:10 A. M. |
| Lawrenceburg and Harrison Accommodation | 4:30 P. M. | 8:30 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:20 P. M. |
| **CINCINNATI AND INDIANAPOLIS JUNCTION R. R.** | | |
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |
| **CINCINNATI AND ZANESVILLE.** | | |
| Mail | 9:00 A. M. | 4:35 P. M. |
| Caboose Accommodation | 4:00 P. M. | 8:00 A. M. |
| **KENTUCKY CENTRAL.** | | |
| Express | 6:00 A. M. | 6:30 P. M. |
| Accommodation | 1:50 P. M. | 11:00 A. M. |
| **ATLANTIC AND GREAT WESTERN RAILWAY.** | | |
| Morning Express | 9:40 A. M. | 6:30 P. M. |
| Night Express | 10:30 P. M. | 7:30 A. M. |

### The Various Plans for a Cincinnati Southern Railroad.

The subject of constructing a Railroad from Cincinnati directly south to the principal ports on the southern seaboard, is still under discussion, and attracts more and more interest. But, as this discussion began thirty years ago, and as the only practical fruit is a short railroad to Lexington, we are not at all certain that there will be anything more than discussion for the next thirty years. Such a road is so necessary to Cincinnati and Kentucky, and urged by so many reasons, that we can not help feeling some little faith in its discussion, and shall therefore write out such new ideas and plans, as may be suggested from time to time. Of course, if it is proposed to make a railroad from Cincinnati southwardly, there will be various plans, for there are various interests. A friend, who is a Civil Engineer, and was formerly engaged in railroad construction in Tennessee, suggests two ideas. 1. That Cincinnati wants a *direct* connection with Memphis, New Orleans, Mobile, etc., by railroad, more than she does with East Tennessee, and that by such *direct* route with Nashville, she will have a railroad, in fact, to Knoxville, Atlanta, etc. We replied, that this was true; but that this was *not a direct* line through East Tennessee to Charleston and Norfolk. If a direct line to the nearest Southern Atlantic port was needed, no line through Nashville would accomplish it. Hence, if we make a direct line from Cincinnati to Nashville, it must be done on its own merits; and if such a line can be found, at a moderate cost, it has merits enough to have it done forthwith This is the view our friend takes of it, and he explains his view fully, in suggesting the route. 2. He says that, 60 miles of new railroad from Danville to Munfordsville, will make a direct line from Cincinnati to Nashville. This will make a direct railroad from Cincinnati to Nashville, 20 miles shorter than the river route, by Louisville to Nashville, and much shorter than any railroad route. This connection can be made promptly and comparatively cheap, and would probably secure all the advantages of a railroad route to the Mississippi and Gulf ports; but, granting this, there is one very obvious difficulty in the way of its being a Cincinnati route. The line from Louisville to Nashville, is a Louisville line constructed for its own interest; while, therefore, the Louisville Road would for its own interest receive from, or to Cincinnati, its managers will be very far from favoring a through trade, between Cincinnati and Nashville. Indeed, it is very certain, that there will be delays, difficulties and obstructions. No doubt such a road could be easily made, and if in advance, it could secure fair terms with the Louisville Road, it might be made profitable. But, after all, this road would *not* do what is now needed to be done. What Cincinnati pre-eminently needs at this time, is a *road directly through the South, to the nearest great port of the Southern Atlantic.* The distance would not be over 550 miles, and must inevitably secure all the *direct trade* between Cincinnati and the Southern ports, and that road will be wholly controlled by Cincinnati interests. To accomplish this, there are several routes proposed. There is the McMinnville; but this is not a direct route through East Tennessee to reach Charleston and Norfolk. It is a route through Middle Tennessee, and reaches the ultimate objects in the South by a circuitous route. So, the route to the west of Cumberland Gap, diverging through the Cumberland Oil region, is liable to the same objection. It has merits, and will accomplish very desirable objects; but it is 50 miles out of the direct route. On the whole, looking over the whole ground, we are decidedly of opinion, that the original plan proposed, to make a direct line of railroad from Cincinnati to Charleston, connecting with the South Carolina Blue Ridge road, which is the most direct line to the Southern Atlantic States; at Bristol, East Tennessee, it would intersect the Virginia and East Tennessee Railroad, taking the cars directly to Lynchburg, and there connecting directly with Richmond, Norfolk and Wilmington. This line, though more costly and difficult at first, will in five years' time, be of fourfold more benefit to Cincinnati, than a Southern Road on any other route. It would make *direct* connections with every important port, from Baltimore to Mobile, and for the *first time* would create a really direct trade, between the Atlantic South, and the West. What does the South, when she again begins cotton planting on an immense scale, need from the West? She needs, and must have the agricultural products of the West. Will she get them from New York and Baltimore? This she has done heretofore; but, with a direct railroad from Cincinnati to the South, this is impossible. *Cincinnati will supply the South* with everything she receives from the West. Is not that *worth a great effort?* Six millions of dollars will accomplish this great effort. And, can not the great city of Cincinnati, and the interior counties of Kentucky, and the great Railroad companies on the north of the Ohio (which are deeply interested,) accomplish that? It can be done with the greatest ease, if there is a will; and if there is not a will, it is proof that there is very little commercial intelligence, or a wise policy, or liberal views, in the great commercial city of the West.

---

The city of Alton has given permission to the Terre Haute & Alton Railroad to build a station house near the Shield's branch bridge, just below the city, for the accomodation of the upper Alton people.

### The New Route of the Atlantic & Great Western Railway.

The Philadelphia *Inquirer* publishes a letter over the signature of "Philadelphian," rebuking the narrow policy which seeks to break up the new plans of the Atlantic & Gt. Western Railway. After stating that the capital of the company was $47,000,000, and an additional margin of $12,793,889 09, and the earnings of the road already built, $126,750 per week, he speaks of the million subscribed at the Bellefonte meeting, avers that besides the broad guage there will be a 4 ft. 8½ inch through track, and says:

An alliance has been formed between the Atlantic & Great Western and Baltimore & Ohio Railways, and the two corporations have agreed to complete at once a "through line" between Cleveland and Washington City, (D. C.), passing through the western part of Pennsylvania. The route and distance will be as follows:

Cleveland to Youngstown (Ohio), 67 miles. Built.

Youngstown to Pittsburg (Pennsylvania), 66 miles.

Pittsburg to Connelsville (Pennsylvania), 59 miles. Built.

Connelsville to Cumberland (Maryland), 90 miles.

Cumberland to Point of Rocks, 110 miles. Built.

Point of Rocks to Washington, 45 miles. Total, Cleveland to Washington, 437 miles.

By this alliance our State secures the completion of what is known as the "Pittsburg & Connelsville Railroad," which develops the counties of Fayette and Somerset. It has been held that if this road was finished, the trade of those counties (and their mineral resources are valuable) would go to Baltimore, instead of coming to this city. This may be the case, but it happens that the residents have no outlet at present to either place, and they argue, with some force, that any railroad, no matter where its terminus may be, will increase the wealth of that portion of the State in which they live.

Upon the completion of the whole programme, the actual *terminal points* of the Atlantic & Great Western Railway will be as follows:

On the East, New York and Philadelphia.

On the West, Pittsburg, Buffalo, Erie, Cleveland, Chicago and Cincinnati.

At Philadelphia it is intimated that depots will be constructed for the shipments of freight and grain on a new ocean line of steamers, and that this point, from its superior manufacturing facilities and easy access to coal and iron, will be the site of the extended shops for the supply of rolling stock.

The writer thinks that the new route to Buffalo will give Pennsylvania a specie market for her coal, an article that does not exist in Canada. Also, that it will give Philadelphia a chance to compete with New York for the Canadian trade.

At Buffalo an international bridge is to be built (entirely with English money), by which the Atlantic & Great Western Railway will connect with the Grand Trunk and Great Western lines of Canada.

The Cleveland *Herald* says: "Pittsburg and Philadelphia will be so connected that a new and competing route will be opened between them, to their manifest advantage, thus giving Philadelphia a choice of routes to the West, and opening the rich timber, mineral and farming lands of the central counties to the markets of the two cities."

So far from injuring anything but the present route of the Philadelphia & Erie R.R., this road will be a great advantage to Northern Pennsylvania, individually, in opening up new country, and to the west generally in forming another and direct outlet for passengers and freight. In this view, it would be better policy on the part of interested corporations to make as advantageous connections as possible, and gracefully submit to the new order of things.

### New Through Route.

A correspondent who is well posted on the matter whereof he speaks, says:

"Everything promises well for a road from Peoria to Warsaw, the coming year. It will form part of a line from Warsaw *via* Peoria, Logansport, Union City, O., Steubenville, Pittsburg, to Philadelphia and New York *via* Pennsylvania Central R.R. The combination has been perfected by which all the companies are interested, and bear, proportionately, the burden. A through freight by same line, temporarily *via* Fort Wayne to Philadelphia, without change of freight cars, will commence in a very few weeks, and as soon as possible through passenger trains with not many changes will also be run—to pave the way for similar trains on the new line when built. You are doubtless aware that the railroad from Logansport to Union is to be pushed through at once."

### The Tribune Almanac for 1866.

This useful annual is before us. It contains apparently even more valuable statistical information than usual. The Suffrage Laws of the several States, President Johnson on the Negro question, the Constitutional Amendment, etc., show how "radically" correct its compilation has been. While the current events of the past year are succinctly stated, and a vast amount of general information of a popular character has been compressed into the 96 pp. We regret that want of space forbids a full enumeration of the features of this political *vade mecum*.

### Connecticut Railroad Project.

It is proposed to make a road, 39 miles in length, from Collinsville to Van Dusenville, Mass., connecting with the Housatonic R. R. at the latter place, passing through New Hartford, Winsted, Norfolk and North Canaan, Conn., Mill River, Great Barrington and Van Dusenville, Mass., and thence *via* Housatonic, connecting west with Albany, Troy and Hudson, north with Lee, Pittsfield and Adams, south with Falls Village, Salisbury, Sharon, Cornwall, Kent and New Milford. This road would shorten the distance between Albany and Troy to Hartford.

### The Mississippi & Tennessee Railroad.

This road which runs from Memphis to Grenada, a distance of about 100 miles, submits to the citizens of Memphis the following statements, and asks of them the loan of $100,000 to enable the road to resume operations:

"The following comprises the amount of effective rolling stock belonging to the Mississippi & Tennessee Road. Eight locomotives, three passenger cars for service, and four others, dreadfully out of repair; one mail car in a forlorn condition, and one venerable baggage car. For purposes of freight, it has forty-two box cars, and forty six flat cars. It must be observed however, that only a portion of the above stock is in its actual possession. The enumeration includes, in addition to what is really in use, a lot of stock purchased from the Government, a considerable part of which remains undelivered in the city of Nashville. Taking it all, however, into the basis of the calculation, there is still left before the road can perform its work—as a minimum demand—two first-class locomotives, two baggage and mail cars, and a half a dozen passenger cars. The cost of this necessary additional outfit, will be $70,000.

Passing from its capacity for carrying, to its capacity for storing freight, we find that nearly every single storehouse on the road has been destroyed, and are advised that the necessity is absolute, for the immediate construction of depots at Memphis, Horn Lake, Cold-water, Senatobia, Como, Saidis, Batesville, Pope's, and Grenada. The lowest estimate of cost for this matter, $26,000, Superadded to this, we are to consider the current expenses of the line, which embrace the payment of salaries the general replacement of cross-ties and a thousand other onerous, and extraordinary charges, which the universal dilapidation of the road has entailed. This will constantly accumulate a mass of obligation, which must tax the net earnings of the road to their uttermost capacity. There remains then, the sum of $96,000, utterly essential to its proximate reinstation, which its crippled capacities alone can not produce, and which therefore, must be contributed, by those whose own prosperity is so largely its debtor.

Leaving out of view the public considerations which advocate it, let us see how a loan to this road appears, simply as a financial proposition; for this purpose, we employ data furnished by the Company for the year 1860, believing that they in no wise exaggerate the expectations, which we may reasonably entertain, should the road be released from its imprisoned activity.

The following statement will exhibit the income of the Company for several months of 1860:

| | Passenger. | Freight | Total. |
|---|---|---|---|
| September..... | $6 304 78 | $12 240 55 | $18 545 36 |
| October..... | 8,093 80 | 25,346 76 | 33,440 56 |
| November..... | 7,113 30 | 20,138 75 | 27,251 04 |
| December..... | 8,041 50 | 15,343 55 | 23,383 70 |

These receipts, it must be recollected, incured when the road was only completed to Oakland, a distance of seventy-eight miles. Now that its through connection is established at Grenada, with the whole vast railway system South and East, it is believed, with a strong

show of reason for the belief, that if properly equipped, it would yield a monthly revenue of $40,000.

The most cautious capitalist must allow that the basis furnished by such an income is broad enough, and sound enough, to support two such loans as that which is now solicited.

### Railway Enterprise.

The Milwaukee Wisconsin, of Dec. 23d, has evidently received no "turkey" from the Northwestern Road, and is proportionately indignant.

The public have been informed through the Chicago Tribune, the Madison Journal, and other western papers in the interest of the Northwestern Railroad and the State of Illinois, that a contract has recently been signed by Wm. B. Ogden, on the part of the State of Illinois and the Northwestern Railroad, and C. J. Brydges, in behalf of the British Government and the Hudson Bay Company, to build an air line railroad from Chicago to Winona, and thence to St. Paul and Lake Winnipeg, and from the head of that lake, fifteen hundred miles up the Saskatchewan river to the eastern slope of the Rocky Mountains.

We are advised that the papers have not told the whole truth in relation to this enterprise; but that it is proposed to have the road extended from the head waters of the Saskatchewan along the eastern side of the Rocky Mountains, through Montana, Idaho, Colorado, New Mexico and Arizona, to Chihuahua, and thence via San Luis Potosi to the City of Mexico, and that the contract will soon be signed by Wm. B. Ogden, and countersigned by Perry H. Smith and Andrew E. Elmore, in behalf of the Northwestern Railroad, and by Mr. Morton Peto and the Emperor Napoleon, in behalf of England and France, and countersigned by the Emperor Maximilian and Duke Wm. M. Gwinn, in behalf of Mexico. The papers, we are told, would have been signed, and the contract closed three weeks ago, and men set to work shoveling snow and laying the track from St. Cloud, Minn., to Fort Gary, on the Red River of the North, and thence around the west shore of Lake Winnipeg, to the mouth of the Sasketchewan, so as to have cars running by the first day of March next, but for the inconvenient circumstance that the Atlantic Ocean lies between Mr. Ogden's Hotel, in New York, and the palace of Louis Napoleon, near Paris. To close this gap and hurry up business, the French Minister, at Washington, has sent his private secretary as a special messenger to the Emperor to get his name to the contract with Ogden's, and thus add very much to the stability of the Emperor's throne, as well as to the prosperity of Mr. Ogden and the city of Chicago.

Andrew E. Elmore, Perry H. Smith, Geo. L. Dunlap, the Galena Packet Company, and Davidson's line of boats, are to have the exclusive navigation of the Red River of the North and of Lake Winnipeg guaranteed to them for the next one thousand years by special charter from the Legislature of Wisconsin. They are to have the privilege of charging any rates they please for freight and passengers; and Messrs. Elmore & Smith are to have the exclusive use of the elevators at the head of Lake Winnipeg and Fort Gray. At both points they propose to divert business to the opposite sides of the river, from where it now is, and has been since their first settlement by the fur traders.

That part of the road between Chicago and Fort Gary is to be built exclusively with the unpaid interest on the preferred stock of the Northwestern Railroad, now past due. That part of the road between Fort Gary and the head waters of the Saskatchewan is to be constructed with the surplus earnings of the Northwestern road, and the interest over seven per cent. realized by the second and third mortgage bond holders of that company.

It is also understood that through the herculean and superhuman efforts of Wm. B. Ogden, the Emperor Alexander will soon sign a contract with Mr. Ogden to extend the Northwestern Railroad from the head waters of the Saskatchewan to the headwaters of McKenzie's river, and thence to Cook's Inlet, in the Russian Possessions, there to connect with the great Russian cable, and thus bring the headquarters of the great Russian telegraph to the city of Chicago. It is understood further, that the Hon. Mr. Jones, the defeated candidate for Senator in the western district of Dodge county, is to be the ticket agent at the Pacific end of this road; that B. F. Hopkins, of Madison, is to have the sleeping cars; and a noted lobby agent, and member of the Jenny Lind Club of this city—who has co-operated with P. H Smith at Madison, for the past four years—as a recognition of his lobby services, is to have the cleaning of the boots of the sleeping car passengers between Cook's Inlet and St. Cloud, Minn.

### Erie Railway Report.

The Erie Railway Company for the fiscal year ending Sept. 30, 1865, earned—

| | | |
|---|---|---|
| From Passengers | $ 4,450,209 60 | |
| From Freight | 10,726,264 33 | |
| From Mails | 101,352 04 | |
| From Telegraph | 15,663 66 | |
| From Storage | 5,954 20 | |
| From Rents | 1,193 02 | |
| | | $15,300,574 85 |

Its payments were:

| | | |
|---|---|---|
| Transportation Expenses | $10,817,188 97 | |
| Rent of Roads | 569,495 00 | |
| Internal Revenue Tax | 427,991 38 | |
| Hudson River Ferry | 165,700 27 | |
| Operating Telegraph | 117,109 77 | |
| Hire of Cars | 69,768 72 | |
| Pavonia Ferry | 34,186 99 | |
| Interest on Bonds | 1,219,783 00 | |
| Div. on Pref. Stock, 7 per cent. | 667,168 53 | |
| Div. on Com. Stock, 8 per cent. | 1,246 103 60 | |
| Surplus | 7,238 62 | |
| | | $15,300 574 85 |

The operating expenses and taxes are, by the above statistics, 80 per cent.

The Company had a floating debt on the 1st of October of $4,245,678, but before its report was sworn to had made a payment from its foreign loan of $1,881,439 65, leaving the floating debt $2,364,238 43, or an increase in its floating debt for the fiscal year of an equal amount.

Its payments for dividends for the year were:

| | |
|---|---|
| On the Preferred 7 per cent | $ 557,168 |
| On the Common 8 per cent | 1,246,103 |
| Total | $1,813,271 |

And now represented by a floating debt.

The profits are now represented by (and not including its English loan)—

| | |
|---|---|
| Stocks | $24 935,800 |
| Bonds | 18,285 900 |
| Floating Debt | 2,364 238 |
| Total | $45,585,938 |

The same items stood Sept. 30, 1862:

| | | |
|---|---|---|
| Stocks | $19,973,260 | |
| Bonds | 19,831 500 | |
| Floating Debt | 480,665 | 40,285,365 |
| Increase in 3 years | | $5,300,573 |

The reduction of $1,881,439 in floating debts was not made from earnings, and should be added to the $5,300,573, making the increased cost of the road in three years $7,382,012. The report for the current year of 1865 remains to be made to the stockholders, and should contain the details of the last English loan, and the terms upon which the business of the Atlantic & Great Western is to be done. The Erie Transportation Company and its list of stockholders should go with the Erie report, and a full exhibit be made of the full amount of money received by officers of the road since it passed out of the hands of the receiver. These facts, and the details of the propeller arrangements at the West, will be gratifying to its English shareholders, and give the property new value.—*N. Y. Tribune.*

### Silver, Copper and Railways in Chili.

On a chilly night, thirty years ago, a shepherd made a fire in the mountains of Copiapo, Chili, and the next morning he saw at his feet a stream of silver, which the heat had melted. That was the discovery of the mines of Copiapo, which have produced in thirty years more than $100,000,000. Now they are rather in the decay; but the produce of the last year was $1,638,272—a sum inferior to that of Guanajuato and Real del Monte, which Maximilian wishes to develop in Mexico, against the decided opinion of old and glorious President Monroe.

Next follows the province of Coquimbo, whose capital, the beautiful town of La Serena, rests a real syren at the foot of the hills by the sea side, supporting a population of 30,000 inhabitants.

The wealth of that province is almost indescribable. There is, indeed, a mountain, that of Famaya, formed, if it could be so said, of pure copper ore. The value of this single product, as it is manufactured in Chili was, in 1864, of $9,506,957, and that of the copper regulus, or in its more imperfect state, $4,716,-912, making in the whole—and not taking in consideration the raw ore sent to England, and which is worth several millions—the immense amount of $14,221,849.

The London *Times*, denouncing to all civilized nations, in warm and eloquent language, the unwarrantable conduct of Spain toward Chili, declares in its leading article of the 19th inst, that out of 498,780 cwt. of manufactured copper imported last year into England, 304,-380 cwt, that is to say, more than two-thirds came from Chili, and that out of 25,000 tons of regulus, 22,000 tuns or almost the whole quantity came from that source.

In the progress of steam locomotion, Chili stands so high that only four countries — the United States, England, France, and Germany — possess greater extent of railroad, taking into consideration the size of the respective countries. Chili possesses at present six main lines of railways.

The northern one connects the port of Caledra with the silver regions of Copiapo, and was the first ever built in South America (1850) previous to the erection of the line of Panama, which has an extent of forty-seven miles. The second is that of Canisal, twenty-four miles in length. It has been built by Americans and native capitalists for bringing to the sea shore the rich copper ores of the interior.

The third is much more important, as it runs south from La Serena, capital of Coqnimbo, and is intended to join with that between

Valparaiso and Santiago, a distance of about five hundred miles south. Of this line ninety miles are complete, and as many in course of progress.

The fourth is the famous railway between Valparaiso and Santiago, over immense mountains, built at an expense of twelve millions of dollars. It was laid out by the eminent American civil engineer, Allen Campbell, now residing in this city, in a very high position, and completed, as a contractor, by another American of great enterprise and generous heart, Henry Meiggs This line extends over more than 135 miles of a rough country, and is considered a work inferior to none for its boldness and solidity.

The fifth line extends to Santiago, through the inland valleys and over level ground, to San Fernando, a distance equal to that between Valparaiso and Santiago, but passing through a highly cultivated plain, it has cost only half the amount of the last. A distinguished American engineer, Colonel Walter W. Evans, now of this city, was the builder of this railway.

Lately, grants for four new branches of railroads were made by the Legislature, and the line going southward from Santiago will be extended this summer to Curico, at an expense of nearly $1,500,000.

The purpose of the government is to build a central line between Santiago and Concepcion, on the banks of the Biobio, a distance of about 600 miles, of which there are 150 completed, the whole of the country having been carefully surveyed. The actual value of the railways of the country, which measure nearly 500 miles, is $30,000,000, and it is thought that the expense of less than that amount more, a complete line of rails will run from La Serena to Concepcion, (a distance of more than 1,000 miles,) and all within fifteen years.

When this great work, to which the country and Congress lent their utmost support, will be completed, Chili can not but be the best organized and best protected against internal or foreign foes among all other countries. Lines of telegraph run parallel to all the railways, and the very day war was declared against Spain, orders were given to extend the magnetic wire from the northern to the southern extremity of the country, which work has been undertaken with unabated energy.—*Scientific American.*

(From the Rock Island Union.)

### An Injunction Issued.

We understand that the Chicago & Rock Island Railroad Company have served an injunction on the Mississippi Railroad Company to stop them from crossing the Old Sterling and Rock Island track, near Port Byron. The object is to prevent the Mississippi Company from making connection with the Port Bryon Road to this city. The people of Rock Island are indirectly, if not directly, interested to the amount of $100,000, in the completion of this road and its extension. There are many rumors afloat as to the cause which induced the Chicago & Rock Island Company to lay the injunction. Some believe it is for the purpose of keeping up the monopoly, which the company has, of the carrying trade. Whatever it may be, there is no doubt but that every thing will be done to aid the Mississippi Company to reach the city. Our people will not remain inactive to this matter. A public meeting should at once be called of our citizens to see what is best to be done.

### An Engineering Narrative of Wonders in Eastern Idaho and Southwest Dacota.

The following communication by L. G. Bennett, Esq., engineer in charge of the late Powder river expedition, will be read with great interest, being a detailed official account of one of the most curious portions of this continent.

Having but recently returned from the plains, where for several months I have been on duty as engineer with the late Powder river Indian expedition, and knowing your taste for geological studies, I will favor you with some extracts from my report, relative to the geography and geology of the region we passed through. My knowledge of geology is limited, and I can only favor you with an account of what I saw, and leave you to make your own conclusions and form your own theories. Although the march up, throughand across the great sand hills was not devoid of interest, yet I will omit this and and take you at once to the

Mauvais Terres or Bad Lands —Reaching White River, we found it high, and the water muddy, from the washings from the adjacent hills, and of about the color and consistency of cream. A deposit of mud on either bank, three or four feet deep, mired the teams and obstructed the crossings until both banks had to be corduroyed. Here we struck an old trail made by trappers and traders followed by Gen. Harney in 1856 and 1857, which led across the mauvais terres, or bad lands.

A Most Remarkable Region.—This is certainly the most singular region I ever beheld, and the men were not far out of the way in calling it the "devil's own." A great portion of these lands is entirely destitute of vegetation and reminds one of an old brickyard, or of clay baked in the sun.

Pyramids and Ruined Temples. — Rising from the plain, sometimes to the altitude of five hundred feet, were masses of hard clay in the form of pyramids or ruined temples crowned with spires and minarets, and worn by the winds into a variety of fantastic shapes. No mountain or other scenery can equal this in dreary wildness and strange beauty. No game and but little vegetation exists here. This is truly "a land of desolation." Often these huge masses of clayey rock were standing in the midst of the plain, isolated and alone. At other times long ranges of bare hills, like a wall, stretched away and became lost in the hazy distance, while through the openings between the cliffs, glimpses could be obtained of the Black hills, looming up in the distance like gigantic storm clouds. These mases of clay were traversed with veins of trap rock generally in a vertical position, and as the surrounding and softer rock gradually became worn by winds and storms, were broken into fragments and scattered over the plain. Often large areas were covered with these fragments of trap rock. Here and there were pebbles and boulders indicative of the drift period, while iron, rock, quartz, scoria and various crystalized and igneous rocks indicated the action of heat.

Marine and Other Fossils. — Scattered over the summit of these cliffs, or around their base, were fragments and sometimes almost perfect fossils of marine and other animals, the most common of which were turtles. I saw many of these that were three feet across, and one that measured seven feet across the shell. Other parties reported seeing one that measured 16 feet across, and I heard of their being much larger. These have generally fallen down from the cliffs, and are more or less mutilated, but enough remains to show the outlines and determine the size of these monsters of a former age. Mastodon bones and enormous teeth are common. Among the petrifactions of a more recent period was a wolf, nearly entire, found by Dr. Anderson.

Diverse Theories.—There are many theories advanced in regard to the peculiarities of this region. These fossils and shells and remains of marine animals, attest the action of water. Indeed, the first impression on reviewing these fragments and broken monuments of a past age is, that this was once an elevated plain, level with the tops of the present cliffs, and that the violent action of water has carried away vast areas of soil and left the substantial portions standing in the present cliffs, columns and pyramids, all bearing evidences of being once submerged by an ocean of waters. At a subsequent period another flood has cut this second plain into deep ravines, leaving thedry water courses which still intersect the country in every direction. The inquiry naturally arises, from whence come the fragments of scoria, pomice stones and other igneous rocks, the result of volcanic action, and which lay scattered promiscuously with marine deposits? Perhaps these have come from the neighboring mountains, the Black hills.

Masses of Fossil Shell Fish. — On the ridges separating the Elk, Bear, Miniwak, Si and Bear Butte creeks were found large masses of fossil fish and other marine animals, some of a huge size. Often the hills seemed entirely composed of these remains. Exposure to the air and storms have broken them to fragments, yet the outlines of turtles, shell fish and orthesera could be distinctly traced. I found portions of the vertebræ of some extinct species, beautifully coruscated with sutures and joints. For miles our horses, at each step, crunched to atoms these remains of a past but ever living age. Hills of fossils that for ages have been mouldering away and becoming portions of the soil, until but faint outlines here and there indicate that the earth and rocks we tread upon were once living animal matter, may well excite surprise. Here are indications of volcanic action and of a deluge strangely commingled and laying side by side.

### British Railway Statistics.

A Parliamentary return furnishes some interesting statistics regarding the railroads of Great Britain. By the reports it appears that there were 12,789 miles of railway open in the United Kingdom in 1864, as compared with 12,322½ miles the year before. Of this 12,789 miles, 7,402 were double and 5,387 single lines of rail. As many as 222,272,165 persons traveled on these lines during the year 1864, as against upward of 204,500,000 during 1863. This is exclusive of season and periodical ticket-holders, of whom there were 76,490 during 1864, and 64,391 during 1863. The following were some of the items composing the traffic in 1864:

| | |
|---|---|
| First class passengers | 17,701,415 |
| Second class passengers | 65,269,169 |
| Third class passengers | 136,301,581 |
| Number of carriages carried | 66,702 |
| Horses | 283,112 |
| Dogs | 459 494 |
| Cattle | 2,993,357 |
| Sheep | 8,455,081 |
| Pigs | 2,224,748 |
| Coal, coke, and other minerals, tons | 75,445,881 |
| General merchandise, tons | 35,914,914 |

The number of trains run was 4,969,969. About three-eighths of these were luggage trains. Altogether they traveled 121,130,403 miles. The passenger trains traveled 66,555,219 miles; the goods trains four million miles less. The total receipts from all sources of traffic amounted to £34,015,564—an increase of almost three millions on the year 1863. First class passengers contributed £3,601,530 to this; second class travelers, £4,545,472, and third class, £5,375,048. Season ticket-holders contributed £393,550. The receipt on account of excess of luggage, carriage, etc., amounted to £1,210,999 and the receeipts from mails, £558,341. The carriage of live stock produced £684,945; of coal and minerals, £6,302.888, and of general merchandise, £11,343,671. The increase of receipts seems to have been general, and is not confined to any particular class of revenue. In no class is there a decrease observable in the receipts of 1864 as compared with 1863.

### New Railroad Project.

The following communication appears in the Bellefontaine Gazette:

*Editors Bellefontaine Gazette.*

There appears to be considerable excitement just now, and quite a lively interest is being manifested on account of a new proposed railroad, commencing at Newark, Licking county, Ohio, and running west through Granville, Delaware or south of Delaware seven or eight miles, direct to Marysville. From thence it is proposed to run on the Bellefontaine & Delaware Railroad to Zanesfield and Bellefontaine. The grading is principally done on said road. From Bellefontaine West, either to Lafayette or Logansport, Indiana. Any person will see at a glance by examining a map, that this proposed route has many advantages over all other roads running to the Eastern cities. It will connect at Newark with the Central Ohio, which connects with the Baltimore & Ohio Railroad at Bellair. It will also connect at Newark with the Steubenville & Pittsburg road, thus making its eastern connections all that is desired. It will pass through some of the richest lands in Ohio and Indiana, and running west from Bellefontaine, it will pass through a section of country from forty to sixty miles wide, which has no railroads running through it east or west. It will connect, say at Logansport, with railroads running in every direction—to Cincinnati, Indianapolis, Chicago, St. Louis, and Springfield, Illinois; also with a line running directly west through Peoria, Illinois, and Burlington, Iowa. The advantages of these connections at La-Fayette or Logansport cannot be over estimated. Thus it will be seen, that this road will be one of the shortest and most direct routes to the Eastern cities from the West and Northwest. It will be at least forty miles shorter than any other route; and a road can be constructed very cheaply on the route proposed.

A railroad meeting was held in Bellefontaine on the 8th inst., which was attended by persons from Newark, Granville and other points along the line. George F. Dawson, of Bellefontaine, Chas. Folsom, of Zanesville, and Geo. Rose, of Granville, were appointed as a committee to confer with certain railroad companies, and to transact other business according to instructions of said meeting, Dr. J. S. Robb, the President of the Bellefontaine & Delaware Railroad Company, was present at the meeting, and is in favor of using said road, and making it a part of the new line. It is expected that the stockholders of the Bellefontaine and Delaware Railroad will donate or relinquish their stock, on condition that said road will be completed. W. V. Marquis and Walter Slicer were appointed to obtain the release of stock.

The meeting adjourned to meet again at such time and place as may be designated by said committee. Communications can be addressed to Charles Folsom, Secretary B. & D. Railroad, Zanesville, O.

### Overland Stage Line.

The great Overland Stage Line, whereof Mr. Ben Holladay is proprietor, starts coaches daily from Omaha, Nebraska City and Atchison respectively, to their point of junction Fort Kearney, 256 miles West, on the Platte, on the 100th parallel of W. longitude, where the branches from Missouri and from Iowa are to unite to form the one Pacific Railroad beyond. Hence, the Overland Stages run nearly on the 40th parallel of North latitude to Denver—now quite a city—and to Idaho City (Colorado)—450 miles from the Fort. Thence the line to Utah, Nevada, and California, runs through Bridgers Pass to Great Salt Lake City—650 miles. From Salt Lake, a branch line 500 miles long turns sharply to the northeast, traversing Northern Utah, Idaho and Montana Territories, reaching Bannock and Virginia cities; while another, 850 miles long, runs north-west by Boise City, Idaho, to the Dalles (Falls) of the Columbia, which is the head of navigation from the ocean on that great river. On these routes, there are now employed 825 men, 156 coaches and express wagons, and 3,530 horses and mules—1,490 of these being required to haul the supplies required by the 264 stations where changes are made and passengers as well as employes fed and cared for. The number of stations on the several routes respectively are as follows:

| | |
|---|---|
| From Atchison by Denver to Salt Lake.... | 110 |
| From Nebraska City to Fort Kearney..... | 15 |
| From Denver to Central City..... | 3 |
| From Salt Lake to the Dalles..... | 76 |
| From Salt Lake to Virginia City, Montana | 45 |

Such is the principal provision yet made for maintaining postal and business intercourse between the States this side and the Rocky Mountain Mines, which have barely begun to be developed. With the Pacific Railroad even half built, the mines will soon attract and profitably employ a population of millions, and will be recognized as one of the most healthy, most thrifty, most inviting regions of the globe.—*N. Y. Tribune.*

### Shoemaking by "Teams."

The genius of mechanism has invaded the realm of Saint Crispin, and shoes are hereafter to be manufactured by arms of iron, and fingers of steel instead of the human hand. A vast deal of machinery has been invented and introduced into this particular branch of business with powerful results; and a most extraordinary revolution has been made through the application of the sewing machine, which carries the huge waxed thread through the stout sole as easy as one of Wheeler & Wilson's machines would carry silk through the upper; but it is the introduction of "teams" which has brought the production to a high point, and reduced the cost of the article.

We notice that some of the journals of the country when speaking of shoemaking "teams" infer that they are teams of horses! One of our city contemporaries actually informs its readers that the eastern manufacturers are using *horse power* in the getting-up of these articles. These "teams" are simply bodies of active, intelligent men, or even boys; who, to the number of ten, gather around a long table; at one end the shoe is commenced by lasting it, and at the other end, when it arrives there, it is found in a finished state, and ready for the packing box.

A "team" of ten men will bottom and thoroughly finish seventy pairs of ladies' gaiters per day, which sell wholesale at three dollars per pair. This celerity of dispatch is the result of a division of labor which renders each individual man or boy perfect in his part, and produces a perfect whole at a much less cost than under the old method, besides insuring a degree of skill and elegant workmanship never before equaled.

This system of making shoes by parts is not only one of rapid production but of great pecuniary profit, and capitalists are now organizing companies in New England to prosecute it on an extended scale.—*Shoe and Leather Reporter.*

### New Mode of Extinguishing Fires.

Even the greatly improved and highly efficient steam fire engine, which is the most valuable auxiliary man has yet brought to his aid in the contest with the devouring flames, is likely to be superseded by a new agent, which is thus described by a foreign print, which also gives the particulars of several searching trials in which the extinguisher came off victorious.

"This is nothing more than the discovery of the fact that water charged with ten times its weight of carbonic acid is a complete extinguisher to fire. The compound is cheaply made and used with facility, being put into a small reservoir, which a man carries easily on his back to any place required, without more hindrance to active exertion than that caused by carrying an ordinary knapsack. Arrived at the place of action, all that the fireman has to do is to turn a cock, and direct the jet by means of a flexible tube and mouth piece upon the fire, the machinery inside giving the power of a force-pump capable of throwing a jet forty feet high. The material is as harmless to life, health or property as an ordinary seidlitz powder, is ready for instant use, and the longer it has been stored in a vessel the more effective it is in action.

"The idea is believed to have originated with a Mr. Amsden, of Liverpool, England, who has also invented the machines for using it effectually, and instituted numerous experiments with them in the presence of the town authorities of Liverpool, London, and other places."

### Pea-Nut Culture in North Carolina.

For many years past the ground pea has been a most important element of commerce in the Cape Fear country—the annual exportation to the Northern States and Canada considerably exceeding 300,000 bushels. A single planter in one of our eastern counties obtained from it a yearly income of $6,000. He raised from 50 to 75 bushels to the acre, and cultivated five acres of the land, which at $1 to the bushel—the ordinary price, $1 26 was frequently realized—yeilding an income of $259 to $300 to the hand. No such result under the old system of labor could be obtained, with staples on similar soils. Our cotton planters contented themselves with a crop yielding from

$12 to $15 per acre, and it was summing up on a large surface that gave a living result. The cultivation of no crop is so easy, and only the simplest implements are required, first the plow to break the land, and then simply the sweep and weeding hoes. The average crop, as we have stated, is from fifty to seventy five bushels to the acre, besides which there will be enough left in the ground to fatten one hundred pounds of pork. The vine, when the pea is removed, makes an excellent forage for cattle—said to be equal to the best Northern hay. From the nut is expressed a valuable oil. During the war just ended, this oil was used in our machine shops, and its lubricating properties are pronounced by competant authority, to be superior to those of whale oil, for the reason that it does not gum at all. One of the qualities of oil is extensively employed in the composition of medicines; another is used for burning purposes, and possesses the virtue of not smoking, while a third makes an excellent salad condiment. Such, and so varied and important are the uses to which this simple product can be devoted; uses, which the uninformed, who have perhaps regarded it only in the light of an indigestible bulb, would never suspect to proceed from its cultivation. —*North Carolina Advertiser.*

### Gold.

Soon after the late war broke out, the shipments of gold from California to the Atlantic seaports dropped from about thirty-five millions annually to about twelve millions All the rest was sent to foreign countries, or brought East by other conveyance, so as to escape capture by the English-Rebel privateers. The tide has again turned, and we again see, by a recent table of shipments, that $20,564,895 have been sent by the California steamers, to New York within the present year. The whole amount sent forward from San Francisco to the Eastern States, from January 1, 1854, to December 20, 1865, is $377,080,719. Of course this is not the whole product for the time specified. Much of the gold is sent to foreign countries to pay for merchandise and to settle exchanges, and a vast deal more is sent East by other modes than regular shipments by the steamers. In a recent work, published by Mr. Roman, at San Francisco, the whole gold product of the Pacific country since 1849, is set down at $750,000,000.

### Franklin and his Gig.

It is now more than a century since Benjamin Franklin, Postmaster General of the American Colonies, by appointment of the Crown, set out in his old gig to make an official inspection of the principal routes. It is about ninety years since he held the same office under the authority of Congress, and when a small folio (still preserved in the department at Washington,) containing but three quires of paper, lasted as his account book for two years. If a Postmaster General now were to undertake to pass over all the established routes, it would take six years of incessant railroad travel at the rate of 125 miles daily; while, if he were to undertake the job in an "old gig," he would require a life time for its performance. Instead of a small folio with its three quires of paper, the postoffice accounts consume every two years 3,000 of the largest sized ledgers, keeping upwards of a hundred clerks constantly employed in recording transactions with more than 30,000 contractors and other persons.

### Cost for Grain Transportation.

From the Springfield, (Illinois.) State Journal.

Hon. Platt Smith, of Dubuque, communicates to the Times, of that city, an article on the subject of grain, with some comparisons as to cost on Eastern and Southern routes. The expense of shipping a bushel of wheat from—

| | |
|---|---|
| Dubuque to Chicago is | 19c |
| Elevatorage and charges at Chicago | 3c |
| Freight from Chicago to Buffalo | 16c |
| Charges at Buffalo | 2c |
| Freight from Buffalo to New York | 25c |
| Total | 65c |

The cost of shipping a bushel of wheat—

| | |
|---|---|
| From Dubuque to St. Louis is | 12c |
| St. Louis to New Orleans | 10c |
| Elevatorage and handling at New Orleans, | 3c |
| Freight from New Orleans to New York | 8c |
| Total | 33c |

The saving by this route is 32c per bushel.

As it is generally expedient for farmers to sell their grain in the winter, when the river is closed, Mr. Smith estimates that grain could be sent from Dubuque *via* the Illinois Central, Cairo and New Orleans, to New York, as follows:

| | |
|---|---|
| Dubuque to Cairo | 25c |
| Elevatorage, etc, at Cairo | 2c |
| Freight, Cairo to New Orleans | 10c |
| Handling and storage in New Orleans | 3c |
| Freight, New Orleans to New York | 8c |
| Total | 48c |

This is 17 cents a bushel less than *via* Chicago.

### Zopissa Paper.

Colonel Szerelmey is best known to this country as being the most successful among the many competitors for the treatment of the stone decay in the new Houses of Parliament. But he has made it the study of his life, during many years of foreign travel and research, to attain a knowledge of what the *zopissa* of the ancient Greeks was composed of. This is one of the ingredients in most of his compositions. But our main business just now is with the products from his paper pulp, treated and manufactured in a way peculiarly his own. They were shown at the exhibition of 1862 but, like many other things, they did not then attract the attention they now apparently deserve. If half of what the colonel and his friends say turns out to be true, his will rank among the most important inventions or discoveries of this generation. He professes to make zopissa paper boards stronger and cheaper by fifty per cent. than oak, indestructible and water-proof. They can be made of any length and thickness, and may be cut to any shape, like wood, with a common saw. They will resist a pressure of 250 lbs. to the square inch, or more if required. They are said to be suitable for ship building, the construction of portable houses, roofing, flooring, and coach-panels, boxes, piano and packing cases, etc., are produced from the same substances as the board, and have the same properties. They can be made of any length, diameter and thickness required, and can be constructed to bear almost any pressure to the square inch. They are said to be fifty per cent cheaper than iron pipes; they are not affected by gas or water; not being porous, no leakage can take place from them, and the material being a non conductor of heat or electricity, they possess many advantages over all other pipes, besides keeping the passing water cool in summer and unfrozen in winter. Rocket tubes, cartridge-cases, large guns, and even houses, are to be manufactured of this paper. Its power of resisting shot is said to be ten to one greater than that of oak. It can be easily molded to any form desired. It is capable of being used in mass, without waste, like fusible metal. It is entirely free from moisture; and while any ordinary paper would corrode iron, this can be made to adhere to and form a covering impervious to water over it It is said that it must eventually be generally used as a covering for boilers, steam tubes, funnels, etc. The raw material, we are informed, is much cheaper than any now in use, and its manufacture simple. But what strikes us most at the present time—just after a second failure to establish telegraphic communication with America—is the confident assertion of Colonel Szerelmey's friends, well-known in several circles, that by the use of zopissa paper alone, of all the materials at present known, can a perfect electric cable be formed. We were shown a rope of less than an inch in diameter, with an ordinary copper wire projecting at each end and through its center. This rope was formed neither of hemp, india-rubber, gutta-percha, cork shavings, nor any ordinarily recommended covering—but simply of zopissa paper It is almost impossible that it can break; it will not stretch, and thus throw the strain on the copper wire, although it is perfectly flexible. Lastly, it has been reported by some of the most skilled electricians of the day as being perfect in insulation and other respects. Now, if anything like what we have heard as to the practicability of this discovery, and its application to so many of the purposes of life, its cheapness, its durability, its comparative safety from fire, and so forth, be feasible—it is high time that the public took pains to be thoroughly informed on the subject. Colonel Szerelmey has been many years among us as an Hungarian exile. He has earned the right to have the merits of his invention fairly tested.—*Practical Mechanics' Journal.*

### The Erie Extension.

The experience of the Erie Railway Company, in the transportation of anthracite, has doubtless been an operating cause, among others, to induce the Erie management to assume the control of the new line in progress of construction east from the Hudson river at Fishkill, opposite Newburgh, with a view to the extension of their own wide gauge to Providence and Boston.

| | Miles. |
|---|---|
| The distance from Fishkill to Boston, via Waterbury, Hartford, Willimantic, is | 226 |
| From Willimantic to Providence | 58½ |
| | 284½ |
| Other branches, three in number | 24 |
| Total mileage of main road and branches | 308½ |

A very considerable portion of the main stem, and all of the Providence branch, are in use, leaving to the new direction only the completion of the work to the Hudson river, a light task, weighed against the advantages which will accrue to the Erie road from a

wide gauge connection with Providence and Boston, also with Hartford City, and a series of towns between.

| | Miles. |
|---|---|
| From Boston to Dunkirk, via Newburgh, the distance is | 652 |
| From Boston, via Newburgh, the distance to Salamanca is | 607 |
| From Boston, via Newburgh and Salamanca, to Cincinnati | 955 |
| The distance from Philadelphia, via Pittsburgh, to Chicago, is | 822 |
| The distance from Philadelphia, via Columbus, to St. Louis, is | 997 |

These two distances from Philadelphia are interpolated not for comparison, but for illustration, in showing that, over the new route of uniform wide gauge, Boston is not so far from the West as, without the Philadelphia distances for a guide, the reader might possibly assume for a premise, in his inductive opinion.

To Boston and to Providence, the Boston, Hartford and Erie Railroad is of the first significance, considered with reference to intercommunication with the West, in near by and distant future time. To interior New England, especially to places on the route, off from the tide-water, the new line will deliver coal from cars all the year round, a consideration of economy and consequence. Altogether, the Boston, Hartford and Erie road is a work combining enterprise with utility, exhibiting boldness in conception, and giving promise of ripe results to Boston and Providence.—*W. R. R. Gazette.*

### Mineral Traffic on British Railways.

The annexed figures show the coal and mineral traffic in 1864 of some of the principal railways of Great Britain:—Blyth and Tyne, 1,860,584 tons of coal and coke; Bristol and Exeter, 158,683 tons of coal and coke; Cambrian, 320,074 tons of coal and coke; Cockermouth and Workington, 171,507 tons of coal and coke, and 27,244 tons of other minerals; Dowlais, 200,549 tons of coal and coke, and 249,796 tons of other minerals; Furness, 246,259 tons of coal and coke, and 797,920 tons of other minerals; Great Eastern, 776,818 tons of coal and coke; Great Northern, 1,934,662 tons of coal and coke; Great Western, 3,187,659 tons of coal and coke, and 1,387,170 tons of other minerals; Lancashire and Yorkshire, 2,554,602 tons of coal and coke, and 953,287 tons of other minerals; Llanelly, 464,503 tons of coal and coke, and 50,534 tons of other minerals; Llantrissant and Taff Vale Junction, 162,540 tons of coal and coke, and 139,275 tons of other minerals; London and North-Western, 8,095,164 tons of coal, coke, and other minerals; London and South-Western, 449,500 tons of coal and coke; London, Brighton, and South Coast, 303,984 tons of coal and coke, and 95,856 tons of other minerals; Londonderry (Seaham to Sunderland), 724,155 tons of coal and coke, and 114,955 tons of other minerals; Manchester, Sheffield, and Lincolnshire, 1,710,755 tons of coal and coke, and 58,659 tons of other minerals; Maryport and Carlisle, 474,646 tons of coal and coke, and 213,784 tons of other minerals; Midland, 4,357,004 tons of coal, coke, and other minerals; Monmouthshire, 1,263,993 tons of coal and coke, and 720,255 tons of other minerals; and North Eastern, 10,147,478 tons of coal and coke, and 2,954,867 tons of other minerals. Some other systems and lines remain to be noted, but they must stand over.—*London Mining Journal, November 25th.*

It will be observed that the "North-Eastern" in 1864, carried "10,147,478 tons of coal and coke," and "2,954,867 tons of other minerals;" total mineral traffic for the year, 13,102,345 tons. This is three times greater than the whole tonnage, mineral and merchandise, of the Philadelphia and Reading Railroad, and is evidence, by parity, that the great mineral carrier of Pennsylvania is only in the boyhood of its capacity and business. Next to the "North-Eastern" stands the "London and North-Western," which carried "8,095,164 tons of coal, coke, and other minerals."—*R. R. & M. Register.*

Railroad Suits in Court.—The Courts of Law and the Legislature have a prospect of plenty to do, in the matters in issue between the Philadelphia & Erie, the Pittsburg & Erie, and the Pennsylvania Railroad Companies on the one part, and the Atlantic & Great Western, the Catawissa, and the Western Central Railroad Companies on the other part. And the same zeal which has hitherto been exhibited to cite the Pennsylvania Railroad Company into Court and into the Legislature, keeping that company in perpetual defense, will now doubtless be shown towards the new combination which looms up in the State. Nor will the contest that will be waged, be waged in any other than earnest mood and intent; for the Pennsylvania Railroad Company, existing by the laws and under the laws of Pennsylvania, will, as in duty bound, take heed that the laws of Pennsylvania be also applied, by the tribunals, to all who may seek to give them too wide and latitudinous interpretation, to carry out plans not contemplated and expressed in the Acts of Assembly. It will be a tournament between luminaries in the legal profession and in railroad circles.—*R. R. & M. Register.*

### A Runaway Railroad Train.

The Rochester *Union* of the 16th says:

The first instance that ever came to our knowledge of a train running away from its conductor, occurred yesterday on the Erie road, at Avon. The morning train from this city stopped at Avon to dine. While the conductor, brakemen, and some eight or ten passengers were at the table, the engineer took his signal to start from the wrong person, and went on his way toward Corning. As the train approached Livonia the signal was given to brake, but was not responded to, and the train ran by the station. The engineer backed up and went back to see what was the matter. He found the train was without conductor or brakemen. He receeived a telegram from the conductor that he was following with an engine, and waited accordingly. Misfortunes do not come singly. The engine which the conductor had procured at Avon to convey himself and passengers to Livonia, broke down soon after starting, and the party had to return and get a carriage, with which they drove to Livonia. The result of the mishap was that the train reached Corning nearly three hours behind time.

One of the passengers who was left with the conductor eating his breakfast, had $17,000 in a satchel which he had left in the car, and a lady had money and valuables to the amount of over $2,000 in her satchel. Three passengers were extremely anxious to overtake the runaway train, and were much relieved from anxiety, when they removed their satchels all right. It was a mishap that might not occur again in many years.

### New York underground Railway.

The chief topic of talk and of newspaper comment in New York at present, is the underground railway. The Legislature passed a bill last winter, incorporating the Metropolitan Railroad Company, with authority to lay the subterranean track, but the Governor vetoed the bill, because it gave certain abusive privileges by which the company was empowered to appropriate sites for its stations with too little regard for the rights and wishes of private property holders. This winter, it is hoped the bill will be properly amended and become a law. The proposed underground road is greatly needed, as every one knows who has attempted to cross Lower Broadway during the busier hours of the afternoon; and its construction would forever preserve the noble street from the disfigurement of a horse railway.

The plan of the proposed road contemplates a tunneling of Broadway, Union Square, Madison Square, Fifth avenue, and so up to Fifty-ninth street, where the Central Park entrance will then meet the astonished optics of the unearthed passenger. As to the expense, the estimates are these: earth and rock excavations, $1,700,000; brick masonry, 1,322,280; stone and concrete masonry, $1,095,150; track, $275,000; rolling stock, $520,000; station grounds, $350,000; stations, $1,400,000; contingencies—engineering, superintendence, &c. $771,546. Then it is proposed to make provisions for carrying 51,250 passengers a day or 25,625 each way. The trip from Bowling Green to the Central Park—four miles and three-fifths—would be made in about twenty minutes, including stoppages. The calculation is that thirty trains an hour, carrying forty-seven passengers each, could be dispatched; and the fare five cents, or ten cents, according to distance.

The Atlantic & Great Western Railroad Company are making vigorous preparations for the completion of their enterprise. The Company has purchased a large tract of the swamp land lying between Jersey City and Hoboken, including the river front extending from the Hoboken depot of the Morris & Essex road to the property of the Erie Railroad Company, which is to be appropriated to the purposes of depots, wharves and workshops. They have also bought, for $350,000, a large machine shop in that vicinity, of which possession is to be taken on the first of January. The Company is making locomotives at the rate of six per month, and instructions have been given at the works to prepare three coal wagons of ten tons capacity per day.

### Underground Railways.

Last summer, while in London, I had a good deal of experience of the underground railways as they are in operation there. Of course, being English roads they are well managed, and they serve their purpose admirably. You descend from a modest little building at the side of the street, and find yourself in a subterreanean station, all lighted by windows in the top contrived like the dead lights of a ship and expanding broadly inward with a surface of white porcelain bricks, for the better reflection of the lights. The cars leave every three or four minutes in long trains, and stop at other stations two or three minutes distant from each other. For three pence you can ride ten or fifteen miles on the second class cars, which are better than our horse cars commonly are. The drawbacks to this under-

ground travel are the difficulties of respiration in an atmosphere impregnated with the smoke and gases from the engine, and the danger of collision, among trains so frequent in their passage. With us, some invention to give proper ventilation would at once be made, but I am afraid that, with the national recklessness of life, the changes of collision on a Broadway underground railway would be vastly greater than on the London roads.—*Corr. Cin. Gazette.*

### New Routes in New York.

The following New York railroad corporations have been recently organized, and their articles of association filed in the office of the Secretary of State:—The Buffalo & Alleghany Railroad Company have consolidated with the Buffalo & Washington Railway Company, under the last named title. The articles of consolidation were filed in the office of the Secretary of State on the 11th instant. The articles of association of the Dunkirk & Fredonia Railway Company were filed on the 14th instant. The road is to run from the Erie Railroad depot at Dunkirk to the village of Fredonia, Chautauqua county. The articles of association of the Ithaca & Towanda Railroad Company were filed on the 22d instant. The route, proposed is from the navigable waters of Cayuga Lake, at Ithaca, through the counties of Tompkins, Chemung and Tioga, to the Pensylvania State line near the village of Waverly, a distance of thirty-five miles. The capital of the company is fixed at two millions of dollars.

### New Method of Rolling Iron.

A recent invention consists of a process for rolling iron into irregular shapes, by which checkered surfaces, projections and depressions can be obtained with the same facility as plain surfaces have heretofore been produced. This is accomplished by means of adjustable discs, placed upon ordinary rollers, which leave upon the bars the impress of the figures which they bear. Instead of solid rolls turned with grooves and peripheries in the ordinary manner, the inventor uses cast or wrought iron spindles, on which are slipped cast iron or steel rings or discs, forming grooves and peripheries corresponding to those of ordinary rolls, and susceptible of an almost infinite variety of combinations. The spindles project beyond the housings of one side, thus giving an opportunity for placing upon them every variety of pattern discs, and requiring but a very few minutes to effect any desired change. Thus one set of spindles, with their accompanying discs, will do the work of a large number of rolls constructed in the old solid form; and fractures of grooves or peripheries can be easily repaired without the loss of the remaining portions of the rolls. Unusual forms can also be made quickly and cheaply, since it is only necessary to cut the discs for them; whereas by the old method entirely new rollers must be made for each new form demanded, and it is impossible to obtain irregular surfaces.

### Welding Iron by Hydraulic Pressure.

If iron is welded by the hammer, the internal portions are imperfectly acted on by the blow, and more or less unsoundness at the center is the necessary rule. This imperfection is found to be removed by the use of the hydraulic press. When the portions to be joined are, at a white heat, placed between the piston and top of the press they are easily kneaded together, as it were; and as soon as the joint is brought down to the proper thickness, the operation is stopped. Joints made in this way are found to be perfectly sound throughout.

### The Farmers' Convention at Bloomington, Illinois.

IMPORTANT ACTION IN REFERENCE TO FREIGHT ROUTES.

The Convention of Illinois farmers, drovers and manufacturers, called to consider the question of railroad monopolies, by which the industrial interests of Illinois are oppressed, met, pursuant to notice, at Bloomington, on the 15th inst. The Convention was composed of many of the staunch men of Illinois. The following resolutions were adopted:

*Resolved*, That it is the duty of Congress to take such immediate action as shall secure the construction of a canal around the Falls of Niagara as expeditiously as the work will allow, of sufficient capacity to admit the passage of vessels drawing fourteen feet of water.

*Resolved*, That we most earnestly urge upon the President of the United States the importance of securing by negotiations with the Government of Great Britain, the free use of the channel of St. Lawrence River; also, the use (at a moderate rate of toll) of the canals around the rapids of said river, with all the improvements thereof which may be made at any time during the term of the treaty, together with the use of all other canals or waterways now existing, or which may be opened, connecting the waters of the Upper Lakes with Lake Ontario or the St. Lawrence, or this river with Lake Champlain, equal privileges of transit being granted to American with British vessels.

*Resolved*, That all appropriations, grants, or charters, made or bestowed by the General or State Governments, for the purpose of commerce or transit, should be so guarded, if possible, as to secure to the industrial classes who furnish the commerce, the largest share of the profits derived therefrom.

*Resolved*, That we petition the General Assembly of the State of New York to open a highway for Western products, by the shortest practicable route from Lake Ontario to the navigable waters of the Hudson River.

*Resolved*, That while we regard the works and objects named in the foregoing resolutions to be of paramount and vital importance to the industrial classes of the West, we also deem it to be in accordance with sound principles of political economy, that measures be taken, as soon as practicable, to prosecute other works of internal improvement, which are obviously destined at no remote period, to be imperatively demanded for the further development of the resources of the great North-west, among which are:

1. The deepening of the channel of the Mississippi River at Rock Island and Des Moines Rapids.
2. The enlargement of the Illinois Canal to the capacity of a ship canal, with a corresponding improvement in the Illinois River.
3. The construction of a ship canal from Lake Champlain to the Hudson River.
4. The improvement of the Fox and Wisconsin Rivers.
5. Improvements in the navigation of Lake St. Clair.
6. Improvement of the Ohio River.

### RAILROAD ITEMS.

THE GEORGIA RAILROADS.—On the Savannah, Albany & Gulf road, we were gratified to learn, that before the 1st of February the cars will certainly be running through from Savannah to Thomasville, and the road will be thoroughly completed

The distance is about two hundred miles. At Quitman a line of stages communicates with Monticello, thence to Tallahassee, Florida, by railroad. At Thomasville, conveyance is at hand for Albany, Ga., through another line of stages.

At Glenmore is the junction of the Brunswick & Albany road, unfinished, though this important branch will soon be put in traveling condition. There are several roads in course of construction connected with the Savannah, Albany & Gulf road, leading into southwestern Georgia, beyond Thomasville, and into Florida, which will eventually bring Savannah in direct communication with all points of Georgia and Florida, connecting the Gulf of Mexico, at Pensacola, with the Atlantic at Savannah.

The Buffalo Express of the 23d ult. has the following:

During the driving storm of yesterday the Lake Shore Railroad did a smashing business. In the first place two freight trains collided near Silver Creek, breaking up the locomotives and cars, and killing two boys, whose names we did not learn. In the afternoon the Erie accommodation train ran into a gravel train at Hamburg, doing some damage to property, but injuring none of the passengers. The day was cold, snowy and blustering, and hence it was almost impossible to see or avoid danger. It is said that Henry Anderson, of Erie, fireman on one of the engines, was also killed.

We learn from the Newton, Iowa *Banner*, of 18th ult., that a railroad meeting was held at that place on the 15th, for the purpose of considering a new project in connection with the Pella, Newton, Marshalltown and St Paul Railroad. It is now proposed to commence at Pella, in Marion Co., and run to Newton, in Jasper Co., and from thence to Marshalltown, from which point strike off in a northeasterly direction to either Cedar Falls or Waterloo, to connect with a road running to St. Paul.

Among the passengers by the *Java* on Wednesday, was Mr. Geo. E. Gray, Engineer in Chief of the Central Pacific Railway, California Division. His object abroad, after a thorough examination of the surveys of his own great work is to review the practical operations of the French and English railways, in order to profit by their experience in the working of the line on the Pacific.

In the case of the New York & New Haven Railroad Company against Robert Schuyler and others, the Court of Appeals, at Albany, have rendered judgments in all cases against plaintiffs affirmed with costs, and general judgments in favor of plaintiffs affirmed with costs.

It is rumored that the Cambridge (Mass) Horse Railroad Company is about to discharge all their conductors whose persons at all approach corpulency, and hire in their places lean men, who will be able with less difficulty to pass through the crowds which throng the cars night and morning.

The Western (Mass.) Railroad will commence building their second track from Springfield westward next week. It is to extend as far as Washington, Berkshire county, and when completed there will be a double track through from Boston to Albany.

A compromise has been effected between the Ohio & Mississippi, and Indianapolis & Cincinnati R. R's; the former now refuse freight for Terre Haute, and the latter refuse freight for Vincennes. This is the end of a very bitter competition.

A despatch dated Sacramento, Cal., December 21, says: "Frank Pixley has bought for the Yuba Railroad the California Central Railroad and its rolling stock for $78,500."

Two French engineers, pupils of the Ecole Centrale, have just started for Judea in order to survey the line of railroad in course of construction, and part of which will soon be thrown open to the public.

The Savannah, Albany & Gulf Railroad will be completely restored in four or five weeks, when cars will run through to Thomasville, Georgia.

Alterations have been made in the running of the trains on the O. & M. R. R. The new time table came into operation Jan. 1.

The Union Pacific Railroad was completed to Topeka, Kansas, on the 25th, the first passenger train from Wyandotte arriving there.

The Mississippi River is to be bridged at Hastings, Minnesota.

The Pacific Railroad Land Grant Bill passed the California Senate on the 21st inst.

## PERSONAL.

PRESENTATION TO A RALROAD PRESIDENT.—The Philadelphia papers contain the report of a presentation to Mr. William G. Moorhead, the President of the Philadelphia and Erie Railroad Company. This road connects Philadelphia with Lake Erie, and runs through the oil region. It has long been a favorite enterprise of Philadelphians, and was under the presidency, at different times, of such men as Nicholas Biddle, Senators Cooper and Bigler. For twenty years it dragged, until Mr. Moorhead, brother of the Hon. J. K. Moorhead, of the House, and a member of the firm of Jay Cooke & Co., was chosen President. The nature of Mr. Moorhead's labors may be understood by the following extract from the speech of Judge Lewis, in making the presentation:

"In 1857, the road had buried scores of its friends, financially and literally. All hopes of its success seemed to have disappeared. The financial crisis of that year appeared to render still darker what was despairingly gloomy before. At this hopeless period in the history of the road, when everybody else had failed, you took charge of it. The first measure proposed by you was to relieve the State from the burden of her canals. They had answered their original purpose, and had become an expense to the public and a source of danger to the purity of elections."

Mr. Moorhead replied, paying a high compliment to the memory of Nicholas Biddle, whose genius, unchecked, he thought, would have made Philadelphia the first city in the Union.—*N. Y. Tribune.*

Mr. D A. KEAN, Gen. Ticket Agent of the Louisville & Nashville Railroad, for the past seven years, has resigned, to engage in the General Grocery, Produce, Commission and Forwarding business at Louisville, under the style of F. H. KEAN & BRO. His many friends will "make a note on't." He is succeeded in office by Mr. J. F. BOYD.

Mr. S. C. Conover, Asst. Superintendent of the Eaton & Hamilton Railroad, was presented with a fine chronometer watch by the employes of the road, who called on him on the 25th.

J. W. Garrett has been unanimously re-elected President of the Baltimore and Ohio Railroad Company.

S. M. Felton, Esq., has been elected President of the Delaware Railroad Company, in place of Hon. R. M. Harrington, deceased.

Major General Mott has been appointed Paymaster of the Camden & Amboy Railroad.

## MONETARY AND COMMERCIAL.

Exchange is heavier, as will be seen by our quotations. The money market is active, at 10 per cent. on first quality paper, and on regular mercantile bills commands 12 per cent.

Gold has declined heavily, and is dull at 142 buying and 143 selling.

We are glad to note an increased activity in pork, and the prospect of a steady supply. Prices are still high, and likely to continue so.

| | Buying. | Selling. |
|---|---|---|
| 5-20's, old | 104⅝ | 105@105⅛ |
| 5-20's, new | 101½ | 102@102¼ |
| 10 40's | 93 | 93⅜ |
| 7 30's, August | 94¼ | 99 |
| 7-30's, June | 98¼ | 98⅝@98¾ |
| 7-30's, July | 98¼ | 98⅜ |
| Certificates | 97¾ | .... |

The following were the closing quotations for exchange and coin:

| | Buying. | Selling. |
|---|---|---|
| New York | 1-10 dis. | par. |
| Philadelphia | 1-10 dis. | par. |
| Boston | 1 10 dis. | par. |
| Gold | 142 | 143 |
| Silver | 134@136 | 136@138 |

The New York market for railway stocks was again slightly off to-day. Quotations compare as follows:

| | Wed. A. M. | Thurs P. M. |
|---|---|---|
| U. S. 6 per cent. Bonds, 1881 | 104⅜ | 104⅛ |
| " 5-20 " old | 104⅞ | 105⅛ |
| " 5-20 " 1864 | 102 | 102⅛ |
| " 5-20 " 1865 | 101⅞ | 102⅛ |
| " 10-40 " | 93⅝ | 93⅜ |
| " One-year Certificates | 98⅝ | 98 |
| 7-30s, 1st series | 99⅛ | 98⅞ |
| 7-30s, 2d series | 98⅞ | 98⅝ |
| 7 30s, 3d series | 98⅝ | 98⅜ |
| New York Central | 97⅝ | 98⅛ |
| Erie | 96⅞ | 96⅝ |
| Hudson River | 101¼ | 101⅛ |
| Reading | 101¼ | 101⅜ |
| Michigan Central | 108 | 108 |
| Michigan Southern | 75⅛ | 74⅛ |
| Illinois Central | 132 | 132 |
| Cleveland & Pittsburg | 85½ | 85⅞ |
| Chicago & Northwestern | 36½ | 36⅛ |
| " " pref | 62⅝ | 62⅝ |
| Cleveland & Toledo | 112⅛ | .... |
| Rock Island | 108⅝ | 108⅜ |
| Pitts. Ft. Wayne & Chicago | 104½ | 104⅜ |
| Ohio & Mississippi Certificates | 28¼ | 28⅛ |

From the *N. Y. Tribune.*

The report of the Erie Railway Company is not what investors looked for, but it is as good as any railway manager expected. The increase in earnings is large, but the advanced expenses have more than absorbed them, and upon a gain in traffic of $2,749,694, there is a decrease in net income, as compared with 1864, of $393,434.

ERIE RECEIPTS AND EXPENSES (FISCAL YEAR.)

| | 1864. | 1865. | Increase. |
|---|---|---|---|
| Receipts | $12 551,480 | $15 300,574 | $2.749 094 |
| Expenses | 9,057,753 | 12,210,281 | 3,142,528 |
| Net income | $ 3 493,727 | $3,100,293 | $393,434 |

While this deficit in net income is shown, the stock-funded debt and floating debt have all increased, as shown by the following table:

STOCK BONDS AND THE FLOATING DEBT.

| | 1864. | 1865. | Increase. |
|---|---|---|---|
| Stock | $24,228,800 | $24,935,800 | $707 000 |
| Bonds | 17 822,900 | 18 285 900 | 52 ,000 |
| Funded Debt | .... | 4 245,678 | 4 245,678 |
| Total | $42,051,700 | $47.467,378 | $5.479,678 |

—or an expansion in its cost of $5,479,678 in the year.

The freight loan is yet to be brought into the Company's figures, but they will not be improved by it. The corporation steadily grows in its earnings, but its cost increases still further, and dividends are paid from borrowed money, as was done when the $10,000,000 common stock was taken.

### Railroad Earnings.

Third Week in December—

| | 1865. | 1864. | Decrease. |
|---|---|---|---|
| Michigan Southern | 78,967 | 92 6'9 | $13 6'2 |
| Detroit & Milwaukee | 23 564 | 29 874 | 6,310 |
| Chi. & Rock Island | 49 348 | 88 572 | 39,224 |
| Chi. & Northwestern | 122,548 | 132,729 | 10,331 |

The following is a statement of the earnings of the Ohio & Mississippi Railroad line from Cincinnati to St. Louis, for November:

| | 1865. | 1864. |
|---|---|---|
| Eastern Division | $242 5-1 35 | $203,590 25 |
| Western Division | 169,971 98 | 142,652 60 |
| Total | $412,553 33 | $346,242 85 |
| Increase of 1865 over 1864 | | $66,310 36 |

Comparative earnings from January 1, to November 30, inclusive:

| | 1865. | 1864. |
|---|---|---|
| Eastern Division | $2,063,107 69 | $1,787,268 63 |
| Western Division | 1,445,579 09 | 1,247,751 94 |
| Total | $3,508,686 78 | $3,035, 20 61 |
| Increase of 1865 over 1864 | | $473,566 17 |

The coupons due Jan. 1, 1866, on bonds of the Galena & Chicago Union Railroad Company will be paid at the office of the Chicago & Northwestern Company, in New York.

The coupons of the Placerville & Sacramento Valley Railroad Company, due Jan 1, will be paid by Wells, Fargo & Co., in New York.

Interest due on Kansas State Bonds, Jan. 1, will be paid by Winslow, Lanier & Co.

The following dividends are announced:

New York, Providence & Boston Railroad, quarterly, 3 per cent., free.

Norwich & Worcester Railroad, semi-annual, 5 per cent., free.

The receipts of the Bellefontaine Railroad for November were, $127,606, on which they paid a revenue tax of $3,191 47.

Best Route to St. Louis and Chicago

**MONDAY, OCT. 31.**

## Indianapolis and Cincinnati



## RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:05 P. M. |
| St. Louis and Chicago Express... | 11 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city. ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt

---

## BENJ. H. LATROBE AND C. H. LATROBE,

### CIVIL ENGINEERS,

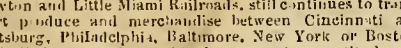
Have opened an Office in Baltimore, in the

**LAW. BUILDINGS,**

St Paul street front, and may be consulted or employed in the Location and Construction of Railways and other Roads and their incidental works throughout the United States. Also the survey of Estates, Water Powers, &c., and will receive a limited number of Pupils for instruction in their Profession. Aug.7 3m

---

## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

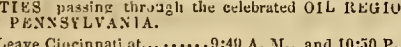
J. J. HOUSTON, General Freight Agent.
my11 Pittsburg, Pa.

---

Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7: 0 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequaled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.



TWO THROUGH TRAINS DAILY

TO

**EASTERN CITIES!**

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9: 0 A. M. | 10:40 P. M. |
| HAMILTON..... | 9:57 " | 11:43 " |
| DAYTON..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:0 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

## THIS IS THE ONLY ROUTE

TO THE

## OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

**SLEEPING CARS**

Provided for all Night Trains, and Smoking Cars for Trains.

**Ample time is allowed, at all hours, for meals.**

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

**CONNECTIONS ARE CERTAIN!**

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and Southwest.

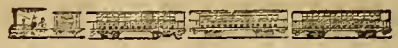
E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, } Passen'r Agents.
CHAS. COOK, }

---

## CENTRAL RAILROAD

—OF—

## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6:30 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:30 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12: 0 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

---

NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:15; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:15; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:15; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p. m.

For Port Chester and intermediate stations, 7:00; 9:20; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12: 5; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

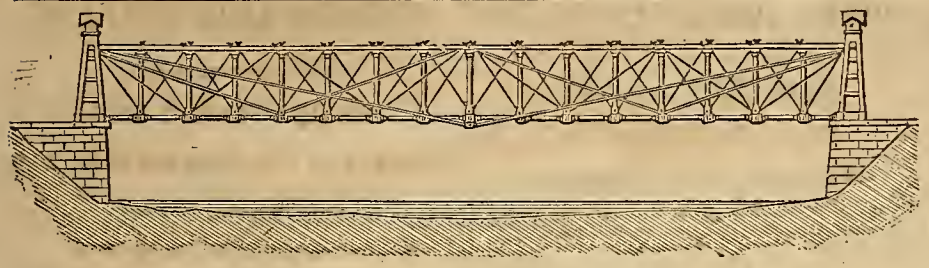
JAMES H. HOYT, Superintendent.

---

NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



(*Plan of Bridge.*)

## FINK'S PATENT

## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

## SCREW BOLTS,

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

## LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use or the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

## KNOX & SHAIN,

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

## FINDINGS,

AND

## MACHINERY,

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

**BUSH & LOBDELL,**

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

## Chilled Wheels and Tyres

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

## AMERICAN BANK NOTE COMPANY.

***Bank Note Engravers & Printers.***

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

## SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

## RAILWAY SPRINGS.

**FREIGHT**








**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,
54 Exchange Place. New York.

---

## W. M. F. HEWSON,

**STOCK BROKER,**

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collections.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new uuning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

**SPEED, SECURITY AND COMFORT,**

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest. Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washingtna City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimore*
J H. SULLIVAN, *Gen. Weg. Ag't, Bellaire, O.*
L M COLE. *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sle ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P M. |
| Mail and Express | 9 40 A M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 5 P M. |
| Hamilton Accommodation | 7 0 P. M. | 6 45 A. M. |
| Richm nd & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis Cairo St. Joseph Jefferson City and all Western Citici.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo Depart. | Arrive. |
|---|---|
| Mail | 7:20 A. M 8:0 A. M. |
| St. Louis, Cairo, & Louisville | 7.50 P. M. 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

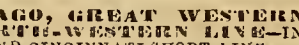
Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 89 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E FOLLETT, General Ticket Agent.

W. D. GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis. at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra. St. Joseph, Atchison, K. T. at 6:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 3:26 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for ticketsvia Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

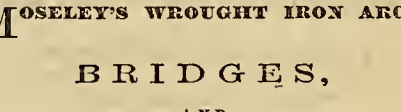
## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applyiug them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

## CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay. **JOHN ELLIS, President.**

**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅛ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

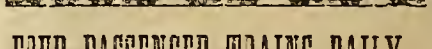
**Cast Iron Gas or Water Pipe**—1¼ to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!



## FOUR PASSENGER TRAINS DAILY

**RAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P M.; 11 30 P M night.

On Sundays. 4.30 A. M ; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.44 P. M (Express

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, - - } Editors

CINCINNATI:
THURSDAY, JANUARY 11, 1866.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 25 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

W. A. MUNSELL,
*General Agent.*


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | Depart. | Arrive. |
|---|---|---|
| Cincinnati Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4: 0 P. M. | 4:00 A. M |
| Morrow Accommodation | 5:30 P M. | 8:00 A. M. |
| Night Express | 7:00 P. M. | 3:50 P M |
| Night Express | 10:00 P M. | 9:40 A. M. |

MARIETTA AND CINCINNATI,

| | | |
|---|---|---|
| Mail | 5:00 A. M. | 7:30 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P. M | 5:45 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Indianapolis & Cambridge City | 7:00 A M. | 9:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:50 P. M. |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P M. |
| Richmond and Chicago | 7:00 A. M. | 9:50 P M. |
| Dayton Accommodation | 6:35 P. M. | 9:35 P. M. |
| Dayton, Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A. M. |
| Richmond & Chicago | 5:30 P. M. | 1:10 P. M. |

CHICAGO & GREAT EASTERN.

| | | |
|---|---|---|
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " " | 5:30 P. M. | 1:20 P. M. |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Mail & Springfield Express | 2:30 P. M. | 4:30 P. M. |
| St. Louis and Chicago Express | 7:30 P. M. | 1:10 A. M |
| Lawrenceburg and Harrison Accommodation | 4:30 P. M. | 8:30 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:20 P. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R.

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M. | 4:35 P. M. |
| Caboose Accommodation | 4:00 P. M. | 8:00 A. M. |

KENTUCKY CENTRAL.

| | | |
|---|---|---|
| Express | 6:00 A. M. | 6:30 P M |
| Accommodation | 1:50 P. M. | 11:00 A. M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Morning Express | 9:40 A. M. | 6:30 P. M. |
| Night Express | 10:50 P. M. | 7:30 A M. |

### The Finances of the United States, and the Movements of Currency.

The Treasury Report on the debts and liabilities of the Government is out for the 30th of December, the last of the year. This, in connection with a new bill proposed by Mr. McCulloch, and presented by the Committee of Ways and Means, ought to receive more criticism than is likely to be bestowed upon it. Few Members of Congress are intelligently acquainted with financial affairs; and the whole conduct of finances is, in fact, given over to the management of whoever may for the time be Secretary of the Treasury. The present Secretary has developed his policy, to one part of which we have objected, and shall continue to object. We think it is trifling with the heavy burdens, the American people now have to hear in the way of taxation, to fund four hundred millions of legal tenders, which now bear no taxation, in 6 per cent. gold bonds; in a word, to ask the people to pay twenty-four millions of dollars annually more than they do, for no purpose but to gratify the Secretary in his theoretical views of contracting the currency! We have no objections to contraction. On the contrary, some contraction of the paper currency must take place, before we can have a reduction of prices. But, why give twenty-four millions of dollars a year, in order to take out of circulation the very part, which of the whole, is most preferred by the people? Such a course is the one proposed by Mr. McCulloch in his report! In order to see the practical working of this plan, we copy here a return of the currency, as given in the *New York Times.*

The following is the movement of United States legal tender and National Bank currency for the past six months:

| | Legal Tender. | National Bank. | Aggregate. |
|---|---|---|---|
| July 1 | $668,776,756 | $146,927,975 | $815,704,791 |
| Aug. 1 | 684,762,665 | 161,196,820 | 845,959,4 6 |
| Sept 1 | 683 735,931 | 179,8 1,529 | 863,717,451 |
| Oct. 1 | 677,731,870 | 191,182,630 | 871,917,500 |
| Nov. 1 | 633 709,511 | 210,266,040 | 843,975,551 |
| Dec. 1 | 626 282,438 | 224,954,87 | 841,2 7,313 |
| Jan. 1 | 614,780,430 | 237,371,155 | 852,151,585 |

It appears from this statement, that the Secretary of the Treasury, after proclaiming a contraction of the currency, has in fact reduced the legal tenders *fifty-four millions*, and increased the National Bank circulation *ninety-one millions!*

This is contracting the currency with a vengeance! But, it may be said, the Secretary is obliged by law to issue the National Bank currency. Certainly, but the effect is the same; and who can tell how soon Congress will increase the number of the National Banks? It seems to us, that years will pass away before the currency will be largely reduced.

But, we think, that the *aggregate* above given is not exactly correct. The following is the true statement of the aggregate currency issued by the Government.

| | |
|---|---|
| Compound Interest Notes | $180,012,141 |
| United States Notes | 426,231,389 |
| Fractional Currency | 26,000,000 |
| Gold Certificates | 7,288,140 |
| National Bank Notes | 237,371,155 |
| Aggregate Government Currency, | $876,902,825 |

The Currency is therefore actually twenty-five millions greater than is above stated. Now, out of eight hundred and seventy-six millions of currency, Mr. McCulloch shows a great desire to take in the United States Notes, which pay no interest! Why not take in first the Compound Interest Notes, which *do* pay interest? And, why are not the United States Notes, better in fact, than the National Bank Notes? But, passing this by, let us turn to the *mode* in which it is proposed to fund the legal tenders. The plan of the Secretary embraces two main principles: 1. That the Bonds shall run *forty years;* and—2d. That a portion shall be payable in Europe, in gold interest. The first prineiple is a good one; the second decidedly bad. As a general principle, the longer Government Bonds have to run, the more they are preferred by moneyed men, and the more saleable. To make them run forty years will probably have a favorable effect on their negotiation. But why make any of them payable in Europe? Must we continue slaves to foreigners? Every bond payable in Europe must have its interest payable in gold, exported from this country. Where is the need of it? The four thousand millions of dollars which the war cost, was raised by the American people from their own resources. If the government wants more money to complete the final settlement of accounts, the American people will furnish it; but why go to Europe at all? Especially why go there, when we must export gold to pay the interest? The last report of the public debt makes the aggregate greater than the one previously, by the sum of two millions of dollars. This corresponds very well with the Secretary's Report, in which he announces that the sum total of the debt would be $3,000,000,000, which was in advance of the *record debt* of November 1st,—$286,000,000. It seems that the record debt is advancing. Taking the Secretary's returns and statements altogether, the following is a statement of his *floating debt, all of which must be funded, before he can touch the currency safely,* viz.:

| | |
|---|---|
| Temporary Loan | $97,257,199 |
| Certificates of Indebtedness | 60 667,000 |
| One and two year 5 per cents | 8,536,900 |
| Three year Compound Interest Notes | 180,012,141 |
| Unfunded Claims | 286,000,000 |
| Aggregate Floating Debt | $632,472,335 |

Now with such a floating debt as this hanging on the Treasury, what can he do in the way of contracting the currency? It is absurd to talk of funding the non-interest legal tenders, at this time; and we trust the good sense of Congress will interfere to prevent this wild scheme of increasing the expenses of the debt, and paying interest in Europe.

### The Ohio & Lake Superior Railroad Company.

This is a new corporation organized under the laws of Michigan. Among those prominent in the movement, we notice D. L. LATOURETTE of Fentonville, Mich., a gentleman of great financial ability.

The road is to be built from Toledo to Saginaw, and thence on an air line to Mackinaw, passing the straits by bridge or tunnel, if practicable (?) thence Westward through the Peninsula and Wisconsin, and connecting with the Northern Pacific Railroad at or near the bead of Lake Superior. Branches will be built to Marquette and Ontonagon, if the main trunk does not take in those points; another branch will run from the Straits to Sault Ste. Marie, and still another, from Saginaw to Detroit, making that city the eastern terminus, while the Southern traffic will pass on to Toledo. The total lengtb will be 700 miles.

The main object is to secure the traffic of the Northern Pacific Railroad and the Lake Superior region. It is intended to be a distinct and entire project, unconnected with any other road proposed or existing, unless it sbould be consolidated with the Northern Pacific.

The proposed capital is $6,000,000, but the aid of Congress and the States through which it passes, and to which it will be a source of prosperity, will be required. The coals of Pennsylvania, Ohio and Michigan will be needed to develop the mineral wealth of Lake Superior, and this road will be the carrier. As a lumber route for the supply of Ohio, it will be of importance, in furnishing us with building material at lower rates than have prevailed either by the Dayton & Michigan R. R., from Toledo, or from Jackson, south to Greenville, O., and Dayton. But it is particularly important as tending to throw the Lake Superior trade Eastward and Southward. If this channel is not secured, this trade will ultimately find an outlet through Canada and the St. Lawrence, or to Portland and the Grand Trunk.

We trust that this route will receive careful investigation at the hands of Congress and capitalists, for it deserves attention not only as a source of individual wealth, but as a portion of our national thoroughfare, through a country abounding in mineral wealth.

---

The St. John *News* says that the railroad west from St. John, is assuming quite the appearance of a public work. Fourteen miles have been placed under contract, the contractors being Mr. William Davidson, and Messrs. Yorston & Ross. Grading is going on at three different points. The number of men engaged is 50, and it is Col. Pierce's intention to keep not less than 100 fully employed till Spring, when it is understood a large force will be set to work.

### Cincinnati and her Railroad Interests.

The following article from the Cincinnati *Journal of Commerce*, we transfer entire to our columns. Its truths can not come home too soon to our citizens, whose strange apathy on the subject is remarkable.

While St. Louis and Chicago are liberally encouraging every enterprise that can be reasonably supposed to contribute to their prosperity, Cincinnati folds her hands, and permits her commercial rivals to divert the trade that is hers by right of position.

Even the Southern road, witb its choice of routes, and its manifold advantages appears destined to inanition, until Kentucky and Tennessee shall have recuperated sufficiently to undertake tbe project themselves, or the neglected region seeks some other outlet.

The unparalleled increase of commercial cities since the invention of railroads, has established the fact that no city need aspire to greatness, which does not avail itself of this important means of internal communication; and in proportion as a city advances in prosperity, is it required still to stretch out iron arms to bring in from all directions the products of the farmer to feed her inhabitants, the wealth of the forest and the mine to supply her manufactures; the wares and fabrics of other countries to supply the necessities or luxurious tastes of life, as well as to carry to every market the products of her own industry, and the gathered wealth of her merchants. Whatever may be said of the advantages of water communicatiou—and they are great beyond doubt—they but fill the demand to a limited degree, for trade must with them follow tbeir channel. But with the Railroad, we make a channel for ourselves, and extend it in whatever direction trade or produce may lie, and take the car to the farmer, or producer or consumer's door, instead of requiring him to hunt up a market through long and devious ways to the water-course. One need but point to any of the great cities as illustrations of tbeir estimate of its value, and you may measure their increase in wealth and population, by the extent of their railroad facilities. These are mere truisms which every one knows. They apply to our city as well as to every other one on the continent. But while every one acknowledges these facts, who has witnessed the growth of the city in every essential of true wealth and greatness, since the first laying of the track of the Little Miami Railroad to the present, yet it is a stubborn fact, that in no city in the country has there been less encouragement given to Railroad enterprise, than in our own—nay, more, in many instances, have obstacles of the most formidable kind been placed in the way of those who, by their enterprise, were really thrusting wealth and business on the city. It is true, the city has, in some instances, loaned her credit to Railroads, but this has only been done with great effort, and often grudgingly coupled with conditions and penalties, as if, like the usurer, she considered that with all her penalties attached, the entire benefit was still with the borrower; and that notwithstanding the advantages she derived from the Road, the pound of flesh was still to be taken. We want more Railroads to center in and connect with this city. Her future growth absolutely demands it. But we want something more. We want also that the city shall be more liberal, treat with a more generous hand, and not hinder or cripple the efforts of those now in existence; the city, for every dollar she has loaned to Railroads, has been repaid a thousand-fold in increased wealth and value of taxable property. What a vast amount has the city gained by the occupancy of the filthy basin of the Whitewater Canal, and the useless Pearl street Market-house, by the Indianapolis Railroad, witb its magnificent depots and heavily freighted cars, around which the business houses and manufactories are going up like magic. And yet for this great prodigality of wealth, brought to a point where before all enterprise blighted as with mildew, the Railroad Company pays the city a heavy annual rental, with uncertainty as to a permanent tenure of her position, or at best, if she does keep it, with the prospect of paying in future leases, an increased rental based on the value of adjoining property, which she herself has entirely built up. And so with the Ohio & Mississippi Railroad. It is true the city loaned its credit to a small amount and upon a high valuation, leased the company a portion of her ground, which for any other purpose, was nearly valueless to her. Foreign capitalists opened up the Road which, for the first time, gave us direct access through Indiana and Illinois, to St. Louis, brought a trade to our market, and took abroad our merchandise and manufactures to the amount of more millions a year than the road cost, and yet with the resources of the road crippled with tbe immense cost of the undertaking, the city still calls for the pound of flesh, in her contracts with the Road, forgetting or not thinking that she would he a bundred fold the gainer by the building of the road, even though she cancelled to the company every dollar it owed her, and surrendered up absolutely every foot of ground leased. And so the road lies floundering in the mud at the lower end of the city; her depots mere shanties, uncertain how long they may remain; while ber cars are filled with passengers and freight to their utmost capacity. And so with ber interest in the Eaton Road. The President of Council is sent out on the market to sell the stock which has already returned to the city, in commercial values, more than its cost, and the small investment in the Covington & Lexington Road is watched regularly by anxious eyes, as if the monetary salvation of the city depended in it.

It is time this whole matter were changed, and a more liberal system substituted by the city authorities. The city would have been the absolute gainer, if she had built every railroad centering here, and then given it up to any company who would have run it. This illiberal spirit persisted in, will meet with resistance. Railroads, though like other corporations, tbey may have no souls, know who their friends are, and where their interests lie. Already they begin to see that it does not lay in favoring cities, or running to particular towns, but that trade and travel will seek the best appointed roads, and the shortest lines of commercial communications. Cincinnati must foster railroads, and encourage them with kindly smiles to come to her. Although favorably situated as to position, there are shorter ways across the continent than past her doors, and other markets than hers open to commerce and manufactures; and while she has been sleeping in her duty of encouraging railroads now built, and those which ought to be built, men of capital and enterprise, and other cities her active competitors for trade and wealth, are cutting off her communications East, West, North and South, and will make her, if possible, but a detatched outpost in the world of trade.

### A Congressional Blunder.

The House in passing the Bill to facilitate Commerce between the States, appears to have overshot the mark, and, while killing such monopolies as the Camden & Amboy road, freed the land grant roads in eight or nine States from the burden of gratuitously carrying the mails. The fact was revealed through an imputation in the Worcester (Mass.) *Spy*, that the bill was intended to release the Illinois Central R. R. from its obligations in this respect, which led to a spirited debate, and ended in a request to the Senate for the return of the bill.

It was stated that the Illinois Central R. R. stock had gone up 17 per cent. since the passage of the bill by the House.

### California, Idaho and Nevada.

From Mr. J. Winchester's letter to the N. Y. Tribune, we gain the following information in regard to these localities, and the improvements in contemplation.

The most cheering indication of future prosperity, in California and Nevada especially, is the energy shown in the prosecution of railroad intercommunication between different and distant portions of those States soon to be extended to the rich mineral placers of Idaho.

Those who have not traveled over the Sierra Nevada Mountains, and across the vast sage-brush and alkaline plains of the Great Basin, can have little conception of the facilities that exist for the construction of railroads After the summit is passed—which is done by the moderate grade of 105 feet to the mile—no obstacle intervenes for cheap and rapid laying of the track for hundreds of miles continuously, with grades of from four to 36 feet only.

THE CENTRAL PACIFIC

Is rapidly pushing the cars up the western slope of the Sierras. Another year's work will carry the iron horse over the Summit, while a large extent of grading will meantime have been accomplished along down the Truckee, toward the sink of Humboldt. The Central Company is setting a worthy example of energy to those working westward from this side. The number of men now employed is *five thousand* with *seven hundred* horses. Next season these numbers will be largely increased as every mile lessens transportation and increases trade with the mineral regions of Nevada and Idaho.

NEW ROUTE TO IDAHO.

The trade of Idaho of which San Francisco is the *entrepôt* (as well as of all the Pacific States and Territories) is already immense and rapidly extending. Heretofore, and now, this trade takes a very circuitous route, by sea to Portland, Oregon, up the Columbia River to Umatilla, and thence by wagon transportation over four hundred miles to Boise City.

The new route is by the Central Pacific Railroad from Sacramento, which is now completed to Colfax, and soon to be opened to Dutch Flat, thence over the mountains to the Denver Lake wagon road to Crystal Peak on the Truckee River, near the State line of California and Nevada, thence down the Truckee River to the Big Bend (to which point the railroad has been definitely located) thence across the desert to the Humboldt River, and up the Valley to the Big Bend of the Humboldt; thence, leaving the river, following northerly through Paradise Valley to Queen's River, up which to Queen's River Station; thence by Summit Springs to the ferry on the Owyhee River; thence up Jordan's Creek to Camp Lyon: thence to Boonville, Owyhee Mines, and Boise City. The distances are as follows:

| | Miles. |
|---|---|
| Sacramento to Colfax | 55 |
| Colfax to Crystal Peak | 70 |
| Crystal Peak to Big Bend of Truckee | 48 |
| Big Bend to Sink of Humboldt | 38 |
| Sink to Big Bend of Humboldt | 99 |
| Big Bend to Willow Station, Paradise Valley | 17 |
| Willow Station to Queen's River Valley | 10 |
| Thence to Queen's River Station | 50 |
| To Summit Springs | 25 |
| Summit Springs to Owyhee Ferry | 30 |
| Owyhee Ferry to Jordan's Creek | 8 |
| Thence to Camp Lyon | 35 |
| Thence to Boonville | 15 |
| Thence to Boise City | 50 |
| Total distance from Owyhee to Boise City | 550 |

The entire route from the Big Bend of the Humboldt to Boise City is an excellent natural wagon-road, with but four or five miles of heavy sand, and is well supplied with water and grass. No obstacle exists to the building of a branch railroad from the Humboldt River to Boise City, and I understand this enterprise is already in contemplation, with every probability of being entered upon as soon as the main trunk reaches the Humboldt Valley. Like the Valley of the Humboldt, which extends eastward toward Salt Lake several hundrd miles, *as the natural route of the railroad* across the continent, the country *through which this branch road must run* to the very heart of the Idaho mines, is equally adapted to railway communication. In the mean time, a

LINE OF STAGES TO BOISE CITY

To run in connection with the Central Pacific Railroad, has been warmly advocated by Mr McLane, Superintendent of Wells, Fargo & Co.'s Express, who urges upon the Company the importance of the route to accommodate the rapidly increasing travel, and the carriage of the product of the Northern gold-fields, now so difficult and so dangerous. To meet the demands of travel over this route to Idaho, in the opinion of the Express Route Agent would require four or five daily coaches.

Mr McLane is now here, and one of the objects of his visit is to lay the matter before the Company and to urge its adoption. There is no doubt that, on a proper representation by our Pacific Senators and Representatives of the pressing need for opening up the interior of these vast mining and agricultural regions to settlement, the Government will give a liberal contract for

A DAILY MAIL TO IDAHO

Over this admirable and most direct route. All that is necessary to secure the objects in view, so important to the population and business of those, now almost inaccessible districts, is to call the attention of the public and Government to the matter. There can be no doubt that a branch of the Pacific Railroad will be ultimately built from the Humboldt to the Idaho mines, as it will not only be the shortest and most direct route, but pass through the richest mineral and agricultural regions of Nevada and Idaho. Some there may be—interested parties—who think the route by Chico or Red Bluff on the upper Sacramento, the best one; but from the testimony of teamsters and others it is virtually impracticable, and the wagon transportation by it could never be shortened.

### Atlantic & Great Western Railway.

It is authoritatively stated that State Senator Morrow B. Lowry has closed a contract with the Atlantic & Great Western Railroad Company, by which the latter company agree to furnish $500,000 to build the road from Erie to Milltown, equip and put it in running order before the close of the year 1866. for which they are to receive 55 per cent. of the earnings, and allow the control and management of the road to remain in the hands of the original owners, or Erie parties; and that the road is not to be operated detrimental to the interests of Erie. In commenting upon this project, the Erie Dispatch says:

"This seems like a short, sweet and efficient arrangement, and one which ought to prove satisfactory, as well as secure the immediate construction of the road But it does not look business-like. It seems too liberal to come from the Atlantic & Great Western people, especially when that company own a large amount of dock property in Cleveland and have made preparations to make that point their lake port on lake Erie; and it can hardly be expected of them to favor, so liberally, an interest which would detract materially from their business via Cleveland. Yet it may be so. At all events, a contract is signed, and the road will be built. Whether Erie is to have what it promises for her, or even if her people purchase largely of the bonds, will be seen in due time."

The traffic on the main line and branches of the Atlantic & Great Western Railway is steadily increasing, and the Company will soon have completed a net work of branches, tapping the principal sources of traffic in the West, and acting as feeders to the main line, which will make it one of the great thoroughfares from the East to the West. Among the contemplated improvements is a branch road from Youngstown to the city of Pittsburg, which will be built under the auspices of the Atlantic & Great Western, and which will soon be under contract. The New Lisbon, Ohio, branch will be finished as early next season as the weather will permit work to be done to advantage, and, during the winter, the track from New Lisbon to Leetona will be ballasted. No trains will run on it during the winter, as the running of the trains will interfere with the work being done.—*New York Times.*

THE RAILROAD OVER MOUNT CENIS.—The French contractors for the building of the line are about to commence the works for the railway over Mount Cenis. The line will be laid next spring, and they expect that in less than fourteen months there will be an unbroken railway communication between France and Italy. The time so saved will be three hours in forty-seven miles between Susa and St. Michel. The most serious difficulty presented by the service will arise from the large quantities of snow falling from the higher parts of the mountain, but there is reason to expect that means devised by the company for keeping the line clear will suffice to insure uninterrupted traveling.

[From the Toledo Blade.]

### Dayton & Michigan Railroad.

Mr. J. B. Monroe, agent of the Dayton & Michigan Railroad Company at Toledo, has furnished us a statement of the freight business of that road during the year 1865. The figures corroborate our assertion, made in the fall, of the large increase in the quantity of southward bound freight passing over the line, but the reality is much beyond our anticipations, and we presume also of those of the parties most interested in the business of the road. The statement of Mr. Monroe, showing the weight, freight and charges on goods received and forwarded from Toledo, for the year ending Dec. 31, 1865, is as follows:

FORWARDED.

| Month. | Weight. | Freight. | Charges. |
|---|---|---|---|
| January..... | 8,752,850 | 2,377,585 | 2,729,835 |
| February.... | 13,209,023 | 3,461,385 | 5,137,049 |
| March..... | 12,385,698 | 3,290,001 | 4,489,817 |
| April..... | 7,947,434 | 2,010,849 | 1,867,030 |
| May..... | 12,003,393 | 2,825,848 | 1,206,139 |
| June..... | 11,930,615 | 2,353,639 | 1,644,853 |
| July..... | 11,090,206 | 2,202,847 | 2,114,612 |
| August ..... | 17,091,442 | 3,271,101 | 3,075,955 |
| September... | 18,704,300 | 3,771,754 | 3,935,571 |
| October..... | 19,945,995 | 4,344,036 | 4,616,858 |
| November... | 22,863,467 | 5,005,227 | 4,991,868 |
| December... | 15,120,420 | 3,263,244 | 3,205,335 |
| Total, '65.. | 171,044,865 | 38,177,516 | 40,014,921 |
| " '64.. | 132,911,144 | | |
| Increase.... | 30,033,709 | | |

RECEIVED.

| Month. | Weight. | Freight. | Charges. |
|---|---|---|---|
| January..... | 3,235,377 | 751,105 | 28,320 |
| February..... | 3,623,976 | 800,975 | 87,375 |
| March..... | 4,354,204 | 861,869 | 286,957 |
| April..... | 4,471,811 | 881,030 | 610,254 |
| May..... | 7,925 504 | 1,401,348 | 1,462,546 |
| June..... | 9,651,471 | 1,463,602 | 1,758,585 |
| July..... | 9,210,149 | 1,265,211 | 2,616,390 |
| August..... | 9,406,963 | 1,247,328 | 1,892,733 |
| September.... | 7,551,072 | 1,273,563 | 941,192 |
| October ..... | 5,614,206 | 1,080,457 | 423,388 |
| November..... | 5,862,715 | 1,086,108 | 509,245 |
| December..... | 2,920,160 | 618,947 | 60,025 |
| Total, '65. | 78,887,608 | 12,731,530 | 10,756,990 |
| " '64. | 134,099,655 | | |
| Decrease... | 60,212,047 | | |

The eastward bound traffic shows a decrease of 50 per cent in consequence of the low rates charged by Southern lines and the high stage of water in the Ohio river, which enabled steamers to carry full cargoes the greater portion of the year to points where they could connect with railroads, and the latter made exceedingly low rates in order to secure a monopoly of the traffic.

The Southward-bound freight increased 30 per cent. over that of 1864—a gratifying fact, and one which probably the management had not anticipated. It is proper for us to state that the facilities of the Company were much less than were demanded by shippers, and we are confident that had the rolling stock been provided by the Company, Mr. M. would now be able to show an increase of 100 per cent. on southward bound freight, instead of only 60 per cent.

The management of the road have decided that their line shall not be "starved" next summer, and have made arrangements for large additions to the rolling stock, and when the contracts are all completed, which will be at no distant day, the facilities of the Dayton & Michigan R R. will be equal to the demand, and not inferior to those of any other so called short line in the West.

### Future Railways in Colorado.

Gov. Gilpin, in his annual message, marks out the path of future routes through his Territory as follows:

"Accompanying the absorption of the wilderness by the people, comes the system of railways. This is destined for us to have an early and extraordinary development. Two railways of supreme importance will traverse the State of Colorado. The Continental railway, passing from sea to sea, will bisect our State east and west; branching from this, a longitudinal railway along the plateau, and pursuing the line of the Rio Bravo del Norte, will affiliate us with the neighboring people of Mexico. From hence to the City of Mexico is less than two thousand miles. This line intermediate between the Cordilleras, level throughout, beneath a most propitious atmosphere, and of easy construction, will traverse successively all the great States and cities of Mexico.

"Having a highly developed and wealthy population of eight millions within the State of Colorado, there will be the convergent point of three great railways, coming from the cities of San Francisco, Mexico and New York. Being on the straight line from Asia to Europe, and exactly equidistant between them, from hence will branch the connections with the people who inhabit the southern prolongations of the American continent. These railroads will consequently unite, by the shortest space, the whole population of the globe, and will become the lines of travel for the whole human race.

### Fire Insurance Losses in 1864-65.

The Fire Insurance Companies of New York suffered heavier losses last year than for many years past. In the following table the losses during each month are given, compared with those of 1863—fires in which the loss amounted to $20,000 only being reckoned:

| | 1864 | | 1865 | |
|---|---|---|---|---|
| Months. | Fires. | Losses. | Fires. | Losses. |
| January... | 21 | $1,650,000 | 31 | $3,300,000 |
| February... | 35 | 4,240,000 | 25 | 2,127,000 |
| March..... | 20 | 1,985,000 | 28 | 1,730,000 |
| April ..... | 20 | 1,535,000 | 25 | 4,400,000 |
| May..... | 19 | 1,947,000 | 16 | 1,975,000 |
| June..... | 23 | 1,855,000 | 31 | 2,996,000 |
| July..... | 47 | 7,060,000 | 26 | 1,760,000 |
| August..... | 17 | 1,105,000 | 29 | 3,096,000 |
| Septem'er. | 28 | 2,235,000 | 27 | 5,080,000 |
| October... | 23 | 1,080,000 | 44 | 5,990,000 |
| November. | 21 | 1,230,000 | 35 | 3,850,000 |
| December. | 20 | 1,600,000 | 42 | 5,525,000 |
| Total..... | 294 | $28,522,000 | 354 | $43,139,000 |

The following table gives the losses by fires in the United States from the year 1855 to 1864, inclusive:

| Year. | Losses | Year. | Losses. |
|---|---|---|---|
| 1855..... | $13,040,000 | 1860 ..... | $15 597 000 |
| 1856 ..... | 21,129,000 | 1861..... | 18,220,000 |
| 1857..... | 15,792 000 | 1862..... | 17,640,000 |
| 1858..... | 11,561 000 | 1863 ..... | 14,000,000 |
| 1859..... | 16,058,000 | 1864..... | 28,522,000 |
| Total ..... | | ..... | $17,449,0001 |

COMMENCED AGAIN. — The Oberlin News says the Railroad Company has again made arrangements to complete the line of railroad between that point and Elyria, left unfinished by those gentlemanly "land sharks" who recently left, and forgot a *few* little bills left behind them. The work again commenced with the New Year, and, the weather permiting, will be pushed to an early completion—at least, the grading of the road.

THE RICH UNCULTIVATED DOMAIN.— The Richmond Times thus sets forth the unsurpassed advantages which the South offers to emigration:

In confidently hoping that a portion of the great tide of emigration setting in from Europe to the United States would soon flow to the South, we have counted largely upon the extraordinary inducements held out to emigrants by the genial climate and the millions of acres of fertile land lying idle here for lack of labor. We present some figures as to the extent of our untilled lands, which must surprise even those whose attention has long been called to the subject.

According to the estimate of 1860, 150,000,000 acres of land in the Southern states, most of it as fertile as any in the world, was neglected and uncultivated; the quantity, we need hardly state, has been greatly increased by the war. In 1860 Alabama, with a population of 964,201 souls, and measuring 50,722 square miles of territory, had within her limits 12,687 acres of uncultivated soil.

Arkansas, with 535,450 souls, and 58,128 square miles, has 7,609,938 such acres.

Delaware, with 112 116 souls, and 2,120 square miles, has 367 230 aeres.

Florida, with 140,425 souls and 59,629 square miles, has 2,273,008 acres.

Georgia, 1,087,000 souls, 52,000 square miles, 18,587,732 acres.

Kentucky, 1,155,689 souls, 37,280 square miles, 11,519,059 acres.

Louisiana, 708,092 souls, 46,431 square miles, 6,765,879 acres.

Maryland, 687,649 souls, 11,124 square miles, 1,833,206 acres.

Mississippi, 761,305 souls, 47,156 square miles, 11,703,556 acres.

Missouri, 1,182,012 souls, 67,880 square miles, 13,737,938 acres.

North Carolina, 982,622 souls, 50,704 square miles, 17,245,685 acres.

South Carolina, 703,708 souls, 29,385 square miles, 11,623,866 acres.

Tennessee, 1,109,891 souls, 45,801 square miles, 13,457,9 0 acres.

Virginia, 1,246,620 souls, 41,251 square miles.

Western Virginia, 349,698 souls, 20,541 square miles: uncultivated lands of the two Virginias, 19,578,949 acres.

### Damages by a City Railroad.

MARINE COURT—TRIAL TERM—Jan. 3.

Before Judge Alker. Albert against the Bleecker-st. and Fulton Ferry Railroad.

This suit was brought to recover the value of a horse and wagon, and loss of time, etc., caused by a collision with one of the defendant's cars. It appeared by the evidence that the plaintiff, an expressman, was taking some packages to Niblo's Theater, and drove up to the rear door in Crosby-st., drawing as near the curb as possible.

He carried his packages into the theater, and when coming up saw the car coming down. There not being space enough to pass, the forward part of the car struck the forward part of the express wagon, breaking it, injuring the harness, and throwing the horse against a tree, injuring the latter so as to render him entirely useless. For this and for his loss of time, 12 days, at $6 a day, the plaintiff asked over $400. After a two days' trial the jury gave a verdict for the plaintiff of $300.

Mr. Chatfield for plaintiff. Mr. Scribner for defendant.

### The Chicago Stock Yards.

The new yards have been erected by a joint stock company of capitalists and railroad companies. The yards lie just outside of the southern limits of the city, about four miles from the Court House; being perhaps five miles by way of the streets. It is open prairie, and contains three hundred and forty-five acres of ground. The work was commenced last June, and it has been thoroughly drained. The total length of the drains and sewers is about thirty miles. The yard is regularly laid out into streets and alleys in the same manner as a large city. This is the greatest feature of the yards. The central thoroughfare is seventy-five feet wide and one mile long. It is divided into three sections, like a bridge, to facilitate the driving of cattle through it.

"There is not a finer or smoother drive in Chicago, and there will be no more sightly one, when the yards are filled with innumerable herds of cattle and swine, and teeming with the activity of buying, selling and transporting stock. Running parallel are other streets, leading to the railroads that surround the yards, and to different sections. These are crossed at right angles by others running east and west. They are all designated by letters and numbers, as are all the pens and different stalls and yards. There are five hundred inclosures, varying in size, which are so constructed that several can be thrown into one. They vary from 20x25 to 85x112 feet, while others are precisely the size of a car, calculated to hold just a car load of stock.

"The yards are provided with six hay barns and six immense corn cribs, convenient to different sections of pens. These barns are 30x150 feet long, one story high, and will contain 500 tons of hay each. The corn cribs are each near one of the barns. Their average capacity is 6,000 bushels of corn. Nine of the principal railroads of the West find a common centre at these yards. There have been constructed fifteen miles of track, as branches, which connect these roads with the yards direct, besides many switch tracks.

"The yard is supplied with water from the Chicago river, which is two feet above the level of the prairie where the pens are erected. Tanks holding 220,000 gallons are kept constantly supplied, and the water is distributed to every pen through over six miles of pipe. Sheds for cattle are also to be erected, supplied with every necessary to that branch of the trade.

"A great scheme is now fast gaining ground in the inventive brains of the officers of the yards, which outrivals the whole that has been done. It is proposed to cut a canal from the south branch of the river to the cattle yards, of a sufficient capacity to float vessels. The river is already navigable to within a short distance of where the canal would enter it, and the remainder could easily be dredged out. Vessels could then come directly in front of the yards, and depart thence to any port.

"The yards are provided with half a dozen of Fairbanks' and Greenleaf's scales for weighing cattle. A commodious hotel, (the Hough House,) and Exchange buildings have been erected. The former contains over three hundred separate rooms in all. Its cost was $155,000.

"To add to the completeness of the yards, the company will soon erect on the grounds a number of neat cottages for the use of men permanently employed about the premises.

"Up to the present time there has been expended upward of *one million of dollars*, but much more will be required to complete the work. Since ground was broken for the undertaking, early in June, three construction trains have run daily between the yards and the city, conveying lumber, brick and other material to the spot."

### Annual Meeting of the Atlantic & Great Western Railway.

The annual meeting of the Atlantic & Great Western Railway (consolidated) was held at Meadville on the 2d inst., when the following Board of twenty-one Directors was elected: S. S. L'Hommedieu, J. J. Shryock, A. W. Bernal, John Sherman, Marvin Kent, Gaylord Church Pearson Church, Wm. Thorp, John Dick, E. P. Brainerd, J. W. Tyler, A. F. Allen, J. Crall, Jacob Riblet, C. W. Culver, Charles Day, Henry Martin, T. W. Kennard, Geo. R. Babcock, C. E. E. Blakesley, Samuel Wann.

The Board of Control in Europe is composed of the following gentlemen: Sir Morton Peto, Chairman, S. Goodson, Esq., W. Fenton, Esq, C. J. Kennard, Esq., Joseph Robinson, Esq., London; L. B. Mozly, Esq., Liverpool.

The following were elected Inspectors: James R. Dick, Wm. Thorp and A. Hastings.

The new Board held a meeting on the morning of the 3d inst. The Boards of Directors of the Western Central Railroad, and the Lewisburg, Centre and Spruce Creek Railroad Companies were also in session yesterday.

The Meadville *Republican* says:

"The Atlantic & Great Western Railway Company have organized a Surgical Department and appointed Dr. J. T. Ray as Surgeon-in Chief. Both as a physician and surgeon he is eminently qualified for the position. He will start to-day to organize a Surgical Corps along the entire line from Salamanca to Dayton."

New Route from New York to Montreal.—Commodore Vanderbilt, of New York, T. R. Parks, of Bennington, Vermont, and others, are planning a new railroad line from New York to Montreal. By building a branch road, of eight miles, from the Housatonic Railroad at Kent, Connecticut, to the Harlem Railroad at Dover Plains, New York, a continuous line from New York to Montreal will be secured, with the exception of a short distance between Hoosick, New York, and the Western Vermout Railroad. The proposed route is as follows: from New York to Dover Plains on the Harlem Road, thence to Kent by the new branch, from Kent to Pittsfield on the Housatonic Road, from Pittsfield to Adams on the North Adams Railroad, from Adams to Hoosick on the Troy and Greenfield Road, then intersect with the Western Vermont Road, and then on to Rutland, Burlington and Montreal. The cost of the branch from Kent to Dover Plains is estimated at $400,000, and the money is promised immediately for both links which are needed to complete the line. While these are being built, the cars will be run over the Western Railroad from Pittsfield to Chatham, and thence on the Harlem Road to New York. This latter arrangement will be entered upon in a few weeks.—*New York Times.*

### The Thirty-seventh State.

Colorado has sent her Senators, Messrs. Chaffee and Evans to Washington. These gentlemen bear with them a formal request from the Governor of the State for an early recognition by Congress.

The State Government is as follows:

EXECUTIVE DEPARTMENT.

Governor.—Wm. Gilpin, Republican.

Lieutenant Governor.—Geo. A. Hinsdale, Democrat.

Secretary of State.—Josiah H. Gest, Republican.

Treasurer.—Alexander W. Atkins, Republican.

Superintendent of Public Instruction.—Rufus K. Frisbee, Republican.

Attorney-General.—U. B. Holloway, Republican.

[All elected for two years from the first Monday in January, 1866.]

SUPREME COURT.

Wm. H. Gorsline, Republican, on all tickets.

Allen A. Bradford, Republican; also on Democratic ticket.

J. Bright Smith, Republican, on straight ticket.

[To draw for terms of one, two and three years; successors to be elected for three years.]

UNITED STATES SENATORS.

John Evans, of Denver City, Republican.

Jerome B. Chaffee, of Ceutral City, Republican.

REPRESENTATIVES IN CONGRESS.

George M. Chilcott, of Peublo County, Republican.

In the Legislature there is a Republican majority of twenty-three on joint ballot. The State Constitution provides for annual sessions of the Legislature, and for an increase of membership, not to exceed twenty-five in the Senate, and seventy five in the House. The present Legislature is to provide for a census, to be taken at once, as a basis of Legislative apportionment. The district arrangement under which this Legislature was elected is the same as that for the territory. The Legislature is now in session at Golden City, fifteen miles west of Denver. The official year begins with the first Monday of January in each year.

### New Railway Project.

The whole country seems alive with new railway enterprises, and at no time during the past ten years has there been more activity in this direction than now. A great many small local lines are projected, either as extensions of existing roads or connecting one road with another, or spurs from main lines to populous villages or towns. As these are mostly for local accomodation, probably local capital will mostly be used in their construction. There are likewise several large enterprises of considerable moment. The proposed new line from Oswego, N. Y., to New York City is quite an important enterprise. It will connect Lake Ontario with the seaboard, saving some forty miles over that of any line now in operation. It will pass through a section of country now but very imperfectly accommodated with railway facilities, furnishing at least half a million of population, whose farms are officially valued at $180,000,000, with easier access to the great markets. The whole coun-

try is heavily timbered, has immense water-power, and promises a very large local or way traffic, while the through or Lake traffic must, from the great saving in distance, be enormously large—thus insuring to the new enterprise an amount of business that not only justifies its construction, but promises handsome profits on the capital to be employed. There are likewise several large enterprises projected in the Western States, extensions of the comparatively new lines further westward, which will, no doubt, at some future day become profitable and valuable, not only to the localities through which they pass, but to the country at large. It is stated that the increase of the Atlantic & Great Western's immediate connections with the lake ports and with the South will amount to not less than six hundred miles of new railway, not including that to be built for its new and independent connection with New York City. The connection of Boston with the New York & Erie Railway at Piermont, is soon to be strenuously carried forward, and this assures the construction of many miles of new railway, and a possible change of gauge for all that are now finished. These latter enterprises being connected and allied with great and successful business interests, will find but little trouble in securing the necessary funds, and we may look for an energetic construction of the work as soon as the season permits.

Then there are the several Pacific railway enterprises, backed up by Government aid in land and money, and that the early construction of which the faith, pride, and interest of the whole country is pledged, and these will add several thousand miles of new railway to our general system. Add to all these the reconstruction of railways in the Southern states, and possibly the building of many new lines at an early day, and we have an amount of railway work sufficient to employ all the floating capital and labor of the country and open a wide, prosperous field for such as we may attract from other countries These new enterprises, tried by the experience of the past, cannot but be successful as investments, and in a business point of view they are imperatively demanded by the best interests of the country. The labor question looms up into gigantic proportions; but a country that has during the past four years thrown between two and three millions of men into its armies need not fear of success, even in this Titanic struggle with nature to make "the crooked straight and the rough places plain." No country in the world offers such splendid opportunities for every kind of labor as this does at this moment, and the half-paid working-men of other lands can here find plenty of work and ample pay.—*American Railway Times.*

The Pacific Railroad Bond Case Decided.—The matter of issue of the Government Bonds to the Kansas Branch of the Pacific Railroad, pending before the Treasury Department, has been decided.

The parties holding Construction Bonds claiming to be converted into Government Bonds, do not get them, the law adviser of the Treasury Department deciding that the bonds must be issued to the railroad company under the law, which does not relieve the company from the obligation to convert them, deciding, at the same time, that no injustice is thereby done the holders of either construction or land grant bonds, as they are fully protected, because the Company can not issue any first mortgage bonds under act of 1854, until all these outstanding bonds are retired.

### Steam in Streets.

Progressive engineers and liberal citizens have long predicted and advocated steam in the streets; and in many ways have long been practically engaged in gradually preparing people and horses for the reception of it, so that when it is formally admitted it shall not surprise nor startle any one. Foremost among those who have partially introdueed it are certain establishments near the *Herald* and *Tribune* offices, in Fulton and Spruce streets: in cold days like the present, the friends of engineering are gratified by the view of cheerful volumes of steam exhausted from engines into the sewers, and rising in brilliant clouds into the air; and not only the scientific, who see what is to come in time, but even the humble poor who warm their hands and feet in it as it rises from the sewer openings, grow hopeful and reconciled, and ready to welcome the steam car, the steam omnibus, cab, wagon, and vehicles for all work; and to bid pathetic farewell to the horse, and wish him comfort when he goes to grass. Meantime legislatures have passed acts to authorize city councils to admit dummies, and they are actually running in small cities; and there are movements to introduce them into large cities. The Legislature of New York is to be asked this session for an act to authorize them in New York city; and, in anticipation, the Second Avenue Railway Company has procured eight dummies, and had them at work on its out-of-town line, ready to run on the town line as soon as their use in formally legalised.

If, instead of introducing steam gradually, it had been suddenly put upon the street railways, there might have been shying; but as we have all become accustomed to it, in most parts of the town, where the examples mentioned have been followed, it can hardly fail to be well received. The people will appreciate the economy of quick and cheap riding, and the horses will be glad to get jobs on the farms, where they can live ten or fifteen years, instead of being used up in three years, as they are in the street passenger business. All this is sure; steam is established in the streets, and the only question is about its extension to other work than driving stationary engines, heating hotels and eating-houses, and pushing foul air from sewers into houses and streets.

### Seizure of a Railroad.

In pursuance of a State law the Governor has taken possession of the Platte County Railroad, which defaulted to the State last year and was handed over to a party of Kansas speculators on payment of $25,000 in cash and a promise to pay $300,000 in state bonds the 1st instant. The promised payment not having been fulfilled, the Governor quietly proceeded to St. Joseph and took possession. There has been a vast deal of corruption in the sale and transfers of this road. Among the parties interested is the notorious Stringfellow, who was mixed up in the early outrages on Free State men in Kansas. When the matter was under debate before the Legislature, during the last session, charges were freely made that money had been used to secure the passage of the bill, and the question was the most bitter and acrimonious of any which arose during the winter. The road runs from Savannah, north of St. Joseph, to Iatan on the south, and will in time be extended to Leavenworth. It is good property, and is to be sold to the highest responsible bidder in a few days.

### Work and Waste.

Every manifestation of physical force involves the metamorphosis of a certain quantity of matter. Prof. Houghton, of Trinity College, Dublin, asserts, as the result of his investigations, that, in the human organism, there is a definite relation between the amount of free exerted, and the amount of urea generated. The urea formed daily in a healthy man, weighing 150 pounds, fluctuates from 400 to 650 grains. Of this, 300 grains are the result of vital work; that is, of force expended in the motions of the digestive organs and the heart, and in sustaining the temperature of the body at a uniform rate. This amount exceeds all other force generated and expended in the system, and is equal to that required to raise 769 tuns one foot high. In addition to the mere act of living, the working man undergoes bodily labor equivalent to lifting 200 tuns one foot high daily, which requires the formation of 77.38 grains of urea. *The force expended in two hours of hard mental labor involves an expenditure of power equal to lifting 222 foot tuns*, and a generation of urea weighing 86 grains. Thus we have a minimum formation of urea during 24 hours, amounting to 477.38 grains, for which there is expended force equal to 969 foot-tuns.—*Annual of Scientific Discovery for 1865.*

In commenting on the above, the editor of *The Circular* (Wallingford, Conn.) says:—"Those who fancy that the student or the writer who sits almost motionless at his desk is 'doing nothing,' should note the above statements, particularly the one we have italicized. According to the test given by this writer, the brain-worker expends in two hours more lifting force than the Irishman does in a whole day's digging in a canal."

### The Pittsburg Railroad—Mount Diablo, California.

The construction of this railroad, which is being built to carry coal from the Mount Diablo coal mines to the steamboat landing on the San Joaquin, is being rapidly pushed ahead. Most of the grading is done, a portion of the rails are down and several cars are already on the track. Messrs. Booth & Co., of the Union Foundry, of this city, have the locomotive well under way which is to do the traction business of this road. It is to be a six-driver tank engine, to run without a tender — the whole weight of the engine and tank being placed upon the driving wheels. This locomotive is to be built to run up a maximum grade of *two hundred and seventy-four feet to the mile!* —the highest grade, we believe, with one exception, yet overcome without a stationary engine. The road is five and one quarter miles in length; the total elevation gained in the distance being *eight hundred and forty-seven feet*, as follows: First section, half a mile, level; second, one mile, seventy-five feet to the mile; third, one and one quarter miles, eighty-five feet; fourth, three quarters of a mile, 105 feet; fifth, one and three quarters, 274 feet to the mile; 300 feet of this section passes through a tunnel which is already completed. This important enterprise has been commenced and carried forward, thus near to its completion, with very little stir; but with a degree of energy which augurs well for the future prosperity of the road and its management. The road will go into operation in about two months, just in time to keep up the winter supply of coal from that important coal mining region.—*San Francisco Press, November 25.*

### Cincinnati & Chattanooga Air Line Railroad.

Mr. W. R. Tracy, in a recent speech at Chattanooga, advocated a straight line railroad from this City, and indicates its route as follows:

"The railroad route should trace the Tennessee River valley, on the North side, along the base of Waldron's Ridge, to a point near Kingston, eighty miles, which section of the route is almost level; thence up the Emory River valley to Montgomery, eighteen miles, on a very easy grade; thence to Huntsville, twenty five miles; thence along the Big South Fork of the Cumberland River to Point Burnside, in Kentucky, a distance of forty-five miles, thus far meeting with no tunnels or other serious obstacles; thence to Somerset, six miles; thence to Stanford, twenty-seven miles; thence to Lancaster, eight miles; thence to Nicholasville, twenty-four miles; joining the Covington & Lexington Railroad, from which point of contact it is one hundred and twelve miles to Cincinnati, making the whole distance from Chattanooga to Cincinnati, three hundred and forty-five miles, one hundred and twelve of which is now built and in running order.

---

Toledo, Logansport & Burlington R. R.—It is stated in a dispatch from Indianapolis "that at the recent meeting of the stockholders of the Toledo, Logansport & Burlington Railroad, that corporation passed into the hands of the Pennsylvania Central Arrangements have been made between this road and the Chicago & Great Eastern Railway for a joint crossing of the Wabash river at Logansport. The building of the road from Peoria, Ill., to the Mississippi river, was put under contract on the 28th ult. The line from Logansport to Union City will be completed about the first of January. This road is designed to connect at Burlington, Iowa, with the Burlington & Missouri River Railroad." If this reported transfer has been made, it is an important movement for this city and the whole of Southern Iowa, as it will give a new and competing line from this point eastward, and one, too, that will be able to cope successfully with the one already in operation. The Pennsylvania Central is one of the best managed roads and one of the strongest companies in the country, and what it undertakes it will accomplish. The main lines from the seaboard to the West are laying their plans to secure as much as possible of the vast trade which will cross the Missouri and the Mississippi as soon as the roads are completed through Iowa, and the Pacific Road stretches away toward the mountains and the golden shores of California. The route by the B. & M. R. R is one of the most direct and practicable, and we do not wonder at the sagacity of the Pennsylvania Central in thus securing a connection with it.

---

### Reorganization of the Northern Pacific Railroad Company.

Boston, January 5.

The reorganization of the Directors of the Northern Pacific Railroad Company was effected to-day. The control and management of this great interest has passed into the hands of the representative capitalists of New England, who will prepare for a vigorous prosecution of the work.

Traffic Across the Plains during 1865.—The Atchison *Daily Champion* of January 3, publishes an accurate statement of the amount of freight shipped from that point across the plains the past year. Twenty seven firms and individual freighters have been engaged in this trade during the year. The aggregate amount of their shipments is twenty one and a half million pounds assorted merchandise, requiring for its transportation nearly 5,000 wagons and 7,000 mules and horses, and nearly 28,000 oxen, employing upwards of 5,000 men. Over half this freight went to Colorado; the remainder to different points in Utah, Montana, Nevada, Idaho, New Mexico, Nebraska and Kansas, including the military posts. The total capital invested in this business is over six millions. The value of merchandise and machinery transported is not definitely known. The overland coaches which leave and arrive here daily, have taken out and brought in over 4,000 passengers. They have also brought here $2,400,000 in specie, and carried out 46,000 pounds of express freight Butterfield's overland dispatch has also carried a large number of passengers each way, but that line being established late in the seasen no accurate statement of its business is made. The freighting business of this city is seven times greater this year than in 1861, five times larger than in 1862, four times larger than in 1863, and 5,000,000 pounds greater than in 1864. The most experienced freighters think the trade of 1866 will be nearly double that of last year.

---

### Taxes on Knowledge.

It was lately shown, in an article in *Harper's Weekly*, that printed books "pay not less than fifteen separate taxes to the Government before they reach the reader." The subject has been followed up by an exposition, based upon the fact that enterprising booksellers in Philadelphia, New York and Boston, "have discovered that they can import books from England, pay the full duty, and lay them down here at less than half the cost of similar books printed, bound, and published in this country." The Philadelphia *Press* says that the well known book firm of J. B. Lippincott & Co., of that city, have arranged largely to import and sell English publications in this country. Paper being duty free in England, a printed book, weighing one pound, can there be produced for twenty-one cents, import duty of five and a quarter cents, against fifty-nine and a quarter cents, the cost of making an American book here. The result, unless a change be made, will be most injurious to American literature, and all the laborers who produce it. *Harper* says, "Congress is prepared, it is said, to modify the internal revenue law where it has proved either ineffective or unduly oppressive. Is it too much to expect that among the taxes which are reduced will be those which increase the cost of books, and which threaten to flood the country with foreign publications to the exclusion of American literature?"

---

Railroad Meeting.—A meeting was held, at Mooresville, Indiana, on the 30th ult, of the citizens of Mooresville and vicinity, interested in the construction of the Indianapolis & Vincennes Railroad. A warm feeling in favor of the road was manifested by those present, and donations to the amount of $8,000 subscribed.

La Crosse & Milwaukee Road Purchased by the Pennsylvania Central.—The sale of the Eastern Division of the La Crosse & Milwaukee Railroad, which was advertised to take place on January 4, has been stopped by the payment on the part of its owners; the Milwaukee & Minnesota Railroad Company, of the accrued interest on the second mortgage, amounting to about $470,000. The company will now take possession under the mandate of the Supreme Court of the United States, of its valuable property, and all the franchises of the late La Crosse & Milwaukee Railroad Company, which includes the ninety-five miles of road between the city of Milwaukee and Portage, which it owns in fee, together with the right of way over the Western Division to the Mississippi River at La Crosse, and all the valuable equipment of rolling stock of the late La Crosse & Milwaukee Company, except forty box-cars, and a small portion of that purchased by the receiver. Some changes have been made in the direction, and the corporation will, in the future, be controlled by a well known, wealthy and influential Philadelphia railroad interest. The Directors are as follows:

Henry M. Alexander, President; Alexander Fleming, Vice-President; John Edgar Thomson, Philadelphia; Thomas A. Scott, Philadelphia; Matthew Baird, Philadelphia; Ashbel Green, New York; A. C. Gunnison, New York; A. S. Bright, New York; Henry E. Weed, Troy.

---

### Construction of the Pacific Railroad.

Fremont, Nebraska, January 5.

Messrs. Simpson and White, the Commissioners who were appointed by the Government to examine and report on the union of the Pacific Railroad, arrived here to-day, accompanied by Thomas C. Durant, Vice-President, and a party of gentlemen. The Commissioners telegraphed to the Secretary of the Interior that they have examined the first section of forty miles of road, and found it in superior condition. A special train came over four miles more of the road. Iron to this place is being laid at the rate of half a mile per day.

---

A letter from Galion, Ohio, dated January 5, gives the following information: "The Round-house, or Engine-house, of the Bellefontaine & Indiana Railway Company, and twelve locomotives were entirely destroyed by fire this morning. The loss is about $300,000. Three of the locomotives belonged to the Cleveland, Columbus & Cincinnati Railway Company. The fire broke out in the room where the oil used in oiling the machinery was kept. Just how it originated is not known. The machine shop, car and paint shops, and car sheds adjoining, were all saved by the brave and desperate efforts of the Fire Department. The firemen are deserving of all praise. The loss, though heavy, will not seriously affect the working of the road. It may disarrange it for a day or two, not longer."

---

A Paris correspondent of the *Scientific American* says a long experience in the machine business in France has convinced him of the immense superiority possessed by our machinists over all continental countries, and even over England, and our advantages are so great and so marked that our principal manufacturers have but to send over specimens of their tools to carry off the palm.

### Compromise between the Atlantic & Gt. Western and Phil. & Reading RR's.

The Pottsville *Miners' Journal* says:

We learn that the Philadelphia and Reading and the Atlantic and Great Western Rail road Companies have entered into the following arrangements: The Philadelphia and Reading Railroad Company is to lay down an additional rail to make a six feet guage over its line and branches, and the Atlantic and Great Western is to lay down an additional rail from Milton to connect with its road, so as to receive the traffic passing over the respective roads. By this means a connection will be made with Philadelphia as well as New York. One of the conditions of the arrangement is the establishment of a line of steamships immediately between Philadelphia and Liverpool. This is an important arrange ment if the rumor is correct.

### A Correction.

A paragraph has appeared in several papers recently to the following effect:

"A late meeting was held at Bellefonte of the Directors of the Lewisburg Centre and Spruce Creek Railroad, one of the connecting links by which the Atlantic & Great Western Road is to reach the seaboard upon its independent line. Hon. G R. Barrett, of Clearfield, was elected President of the corporation: Sir Morton Peto, of England, Vice-President; and T. W. Kennard, Engineer. Judge Barrett then, as Attorney of the Atlantic & Great Western Railroad Company subscribed one million of dollars towards the completion of this road, and gave notice that he would take the balance of whatever stock was not subscribed by the people along the line."

The above contains some remarkable inaccuracies. The facts of the case are as follows:

The meeting was held on the 13th ult at Aaronsburg, Centre county, George F Miller, Member of Congress from the 14th District, was elected President, and James P. Coburn, Secretary. Judge G. Church, of Meadville, in behalf of T. W. Kennard, subscribed two millions of dollars of stock. Thirteen Directors were elected, including G. Church, P. Church, and R. M. N. Taylor, of Meadville. A meeting of these Directors was held in Meadville, on Tuesday last.

### Southern Pacific Railroad.

The President of the Southern Pacific Railway has issued a notice, requiring all applications for recognition of stock to be made in March, except those from Texas, which must be sent in by the first of April, or be forever debarred from doing so.

Cincinnati & Chicago Railroad.—Yesterday a bill in Chancery was filed in the United States Circuit Court, by Samuel Boggs, Robert Hamlin, Jacob Vose, James Price, et al. vs. Cincinnati & Chicago Air Line Railroad. The complainants aver that the recent sale, at which the present company purchased the road was fraudulent, and ask that such sale be set aside. The question will come up before the United States Circuit Court, at the May term. Property to the amount of over $4,000,000 is involved in this action. Hendricks and Hord have been retained as counsel for the plaintiffs. —*Indianapolis Herald.*

### Cutting Rates.

The New York Tribune of Friday says:

The four trunk lines are now engaged in a contest for freights, which, for vigor, has never been equaled. Between Buffalo and New York freight is taken at 45 cents per 100 lbs., a reduction of 32 cents per hundred within a few days. The usual winter rate is $1 10 per 100 lbs. There is not a road between the Hudson river and the Mississippi which has not a large amount of rolling stock wholly idle, and some routes count their empty cars by miles. The opening of the Baltimore & Ohio Road, and the loss of transportation growing out of army movements, begin to tell upon earnings, and must continue so throughout the year.

### New York & Washington Railroad.

A bill was introduced by Representative Stevens on Monday which sets forth that the necessities of the Government require the construction of a national military and postal railroad between the cities of Washington and New York. A company is authorized in the name and on behalf of the United States to construct and enjoy a continuous line of railway between Washington and New York. An engineer is to be appointed by the corporation, but is to be approved by the Secretary of the Interior. The route is to be through Maryland, Pennsylvania, and New Jersey, and first class passengers are to be carried at three cts. per mile; and the road is to cross the Susquehanna River above tide-water.

### Commissioners' Report on the Union Pacific Railroad.

Fremont, Nebraska, Jan. 5.—Mrssrs. Simpson & White, the Commissioners who were appointed by Government to examine and report on the Union Pacific Railroad, arrived here to day, accompanied by Thomas C. Durant, Vice President, and a party of gentlemen.

The Commissioners telegraphed the Secretary of the Interior that they have examined the first section of forty miles of the road and found it in superior condition.

A special train came over four miles more of the road. The iron to this place is being laid at the rate of one-half mile per day.

### French Railroads.

The total length of railroads in operation, January 1, 1865, was 8,311 miles, and concessions has been granted for 3,304 miles, making a total of 12,417 miles completed, in progress and projected. The amount of money actually expended on these enterprises to date was $1,300,000,000, and there remained to be expended on the roads in progress and projected an additional sum of $570,000,000, which makes a total of $1.780,000,000, or about $150,000 per mile. The tunnels on all the railroads in the Empire are 366 in number, and would, if combined, measure 377 leagues in length. The largest is that of the Nerthe, near Marseilles, on the Lyons railroad, which cost $2,100,000; that of Blaisy on the same line $1,600,000, and that of Credo, between Lyons and Geneva, $1,300,000. The entire cost of the tunnels, bridges and viaducts on the various French railroads amount to $86,536,390.

The largest canal in the world is in China. It was commenced in the 10th century, is two thousand miles long, and passes through forty-one cities.

### RAILROAD ITEMS.

An engineer on the Orange and Alexandria railroad, while the train was in rapid motion, saw a hawk sitting upon the track and imagining it to be a broken rail, became so frightened that he jumped from the engine and was immediately killed.

Experiments are being made in Paris for drawing omnibuses by locomotives.

Arrived.—The first of the new locomotives for the Reno, Oil Creek and Pithole Railroad, arrived here on Monday last, and is now hard at work. It is a splendid and perfect piece of machinery, and is most beautifully ornamented with the handiwork of an artist's brush. The second hand concern, which has been busy for the past two weeks, must "clear the track" or the new comer will run over it, especially when going up a grade.

Four more new locomotives are soon to follow.—*Reno Times.*

In Minnesota, for a few days past, the railroad trains have stopped running, the thermometer indicating twenty-four degrees below zero. The St. Paul *Pioneer* of the 22d reports the snow fifteen inches deep. The papers of that place report snow-drifts that could not be penetrated by the united force of three locomotives. On the 12th inst., two soldiers near Fort Ripley were frozen to death. The Mississippi closed this year on the 13th.

The Meadville *Republican* reports that the Atlantic & Great Western Railway Company will speedily erect a large brick building in the rear of the present depot, for the exclusive occupancy of the officers of the company, the present offices not being considered sufficiently secure from fire.

No less than thirty conductors were dismissed from one of the New York city railroad companies, in the course of a single week, for dishonesty, which was discovered through the means of detectives, many of whom are women, and in the regular pay of the company.

The rolling mill at Chattanooga is turning out one mile and a quarter of railroad iron per day.

The Nashville & Decatur and Tennessee & Alabama railroads which suffered severely in the late freshets, are repaired, and ready for business again.

The Nashville and Chattanooga Road was not damaged by the recent freshets, but the communication south of that point suffered so severely that we fear travel and the shipment of freight cannot be resumed for some time to come.

The head clerk in the Supply Department of the Illinois Central R. R. several days ago, discovered that the safe in the office had been robbed of $1,800 in currency and Government bonds. N. W. Tobin, clerk in the same department, has been arrested and confesses he is the robber.

The Nashville & Chattanooga railroad has begun a suit against its late President for one million dollars damage for permitting the rebel government to use the road and its machinery during the war.

The Toledo, Wabash & Western railroad, on New Years day, completed their road from Jacksonville, Ill., to St. Louis, a distanee of eighty miles. From Jacksonville, tbe road runs direct to Keokuk, Iowa, plaeing the eity witbin nine hours' travel of St. Louis.

A. M. Waterman, and Hill, Knox & Co., of Warsaw, have taken the contraet to build the connection link of the Toledo, Warsaw & Peoria railroad, from Cartbage to Busbnell, the work to begin at onee. This will shorten the line from Chieago to Warsaw and Keokuk some twenty miles.

The Elmira (N. Y.) *Gazette* says that the Northern Central Railway Company has purchased the northern division of the Erie railway from Elmira to Canandaigua and during the coming season intends laying the narrow guage track of its road on that line, so as to enable it to send througb trains from Baltimore to Niagara Falls.

An Atchison dispatch gives the summary of the overland freigbt business for the year. The number of firms engaged is 27, and the capital invested $6,000,000. The aggregate amount of shipments during the past year was 20,500,000 pounds of assorted merchandise. The freigbting business of tbat city is seven fold larger than in 1861.

The Kalamazoo *Telegraph* gives eurreney to the statement that the authorities of the Michigan Central Railroad have proposed to the management of the Grand Trunk railway, to build a double traek from Kalamazoo to Chicago, to accommodate trains on both roads, provided the Grand Trunk makes its line from Pt. Huron by way of Lansing to Kalamazoo.

The Nashville Union and Ameriean says: "The reeent rains have interfered considerably with the transportation of freight on the Western & Atlantie Railroad, by washing away several bridges on the Chattahooehee and Etowah rivers. We learn, however, that arrangements have been made by whieh passengers can be taken across these rivers, but it will be ten or twenty days before the bridges can be repaired so as to enable the eompany to transport freight. A large number of hands are at work repairing tbe road, and in a short time it is expected that tbe work will be finished."

New Railroad Arrangements.—The Elmira (New York) *Gazette* states that the Northern Central Railway Company have purebased the Northern Division of the Erie Railway, from Elmira to Canandaigua, and during the eoming season intend laying the narrow gauge traek on the road on that line, so as to enable them to send through trains from Baltimore to Niagara falls. H. B. Smith will remain for the present as station agent at Elmira; H. D. V. Pratt will be Superintendent of the Northern Division, also Superintendent of the Susquehanna Division of the Erie Road. The Rochester *Union*, eomment ing on this announeement, says, tbat "the Northern Central Railway may send trains from Baltimore to Canandaigua, but beyond that point they will have to depend upon the New York Central for a traek to send cars over. This privilege may be seeured, perhaps."

Railroad Presidents.—The Assessor has received a decision from Internal Revenue Commissioner Rollins, that railroad presidents, as the principals of such corporations, must take a license, as common carriers under the revenue law.—*Indianapolis Journal.*

## PERSONAL.

Henry Nottingham, Superintendent of the Cleveland & Erie Railroad was the recipient on New Years of a solid silver serviee forty-two pieees in all, presented by his friends and employes, at a cost of $1,300.

Many of our most distinguisbed officers have sinee the close of the war, turned their attention to developing the mineral resources of the South. Among the number of offieers engaged in such enterprises, we learn of Major General R. W. Johnson and Brigadier General Whipple, of General Thomas' staff, who, in connection with our townsman, General Silas F. Miller, have secured in Middle Tennessee and North Alabama some 6,000 aeres of petroleum and mineral lands, whieh they are now engaged in developing.—*Cin. Com.*

W. R. Arthur, Esq., for many years past General Superintendent of the Illinois Central Railroad, has resigned his position on account of ill health. Mr. Arthur was a most effieient and popular offieer.

T. H. Goodman, formerly Ticket Agent of the Atlantie & Great Western Railway, has heen appointed General Ticket and Passenger Agent of the Atlantie & Mississippi Steamship Line, with headquarters at St. Louis. Mr. Goodman has had long experienee in railway life, and will be a valuable acquisition to the above line.

## MONETARY AND COMMERCIAL.

Gold still indulges in its unaeeountable vagaries. It declined among the tbirties during the past week, without any adequate reason, and is now gradually regaining the old standard of 145, though tbe state of the money market would justify tbe expeetation of a further deeline. The large amount of eurreney needed to move the aeeumulating hog crop has tbus far been readily furnished by our bankers, and trade generally has improved.

We quote as follows:

| | Buying. | Selling. |
|---|---|---|
| N. Y. Exchange | 1-10@¼ dis. | par. |
| Philadelphia | 1-10@⅛ dis. | par. |
| Boston | 1-10@⅛ dis. | par. |
| Baltimore | ¼@ .. dis. | 1-10@ .. dis. |
| Silver | 30 @33 pr | 33 @35 pr. |
| Gold | 38½@ .. pr. | @39½ pr. |
| Certificates | 2@2½c dis. | 1 @ .. |

The railway stoek market shows signs of improvement, as below:

| | Tues. P. M. | Thurs P. M. |
|---|---|---|
| 1881's | 104¼ | 104 |
| U. S. 5-20's, 1st issue | 104 | 104 |
| " 5-20's 2d issue | 102⅝ | 101¾ |
| " 5-20's, 3d issue | 101¾ | 101¾ |
| " 10-40's | 93⅝ | 98¼ |
| " One-year Certificates | 99⅜ | 98¼ |
| 7-30s, 1st series | 98⅝ | 98¼ |
| 7-30s, 2d series | 98¼ | 98⅜ |
| 7 30s, 3d series | 98¼ | 98¼ |
| New York Central | 96¼ | 95⅝ |
| Erie | 95⅞ | 96¼ |
| Hudson River | 107¼ | 106⅝ |
| Reading | 103¼ | 102⅝ |
| Michigan Central, eq. div. | 104¼ | 105 |
| Michigan Southern | 70⅝ | 69¾ |
| Illinois Central | 128 bid | 127 |
| Cleveland & Pittsburg | 81 | 80¼ |
| Chicago & Northwestern | 32¾ | 33¼ |
| " " pref. | 59¼ | 59¾ |
| Cleveland & Toledo | .... | 108¾ |
| Rock Island | 106 | 105¾ |
| Pitts., Ft. Wayne & Chicago | 99¾ | 98¾ |
| Ohio & Mississippi Certificates | 27 | 26¾ |

## Railroad Earnings.

Montb of November—

| | 1865. | 1864. | Decrease. |
|---|---|---|---|
| Chic. & Rock Island | $190,272 | $308,187 | $117,915 |

—or 38 per cent.

Third Week in December—

| | 1865. | 1864. | Increase. |
|---|---|---|---|
| Marietta & Cincinnati | $22,921 | $19,897 | 3,024 |
| Michigan Central | 79,838 | 86 099 | * 15,161 |
| Grand Trunk (Canada) | 123,915 | 106,658 | 17,257 |

* Decrease.

Fourtb Week in December—

| | 1865. | 1864. | Decrease. |
|---|---|---|---|
| Gt. Western (Canada) | $53,025 | $ 8,600 | $5,575 |
| Michigan Central | 100,180 | 124,721 | 24,541 |
| Grand Trunk (Canada) | 107,854 | 123,564 | 15,710 |
| Marietta & Cincinnati | 29,897 | 31 3 3 | 1,456 |
| Chic & Northwestern | 153 408 | 179,638 | 26 230 |
| Michigan Southern | 107 741 | 132,030 | 24,289 |
| Detroit & Milwaukee | 22,570 | 26,707 | 4,137 |

Montb of December—

| | 1865 | 1864. | Decrease. |
|---|---|---|---|
| Michigan Central | $328,869 | $376,470 | $47,601 |
| Chic. & Northwest'n | 546,609 | 563,400 | 16,791 |
| Michigan Southern | 356,912 | 398 091 | 41,179 |
| Chicag & Alton | 224,022 | 241,582 | 17,560 |

First Week in January—

| | 1866. | 1865. | Increase. |
|---|---|---|---|
| Chicago & Northwest'n | $135,250 | $115,289 | $ 9 961 |

The question of tolling railway traffie will come up at an early day in the Legislature of this State. The bill will, we are informed, include the Erie Railway, and all roads whieh in their infaney have reeeived State aid. The Erie has been forgiven a debt which now amounts to $7,000,000, prineipal and interest, whieh members of the Legislature feel should be returned to the State, now that the road enunts its traffic in excess of one million per month.

The elosing week shows a large falling off on the passenger and freight traffic, and for January the earnings will be much redueed. At the meeting of the directors yesterday no dividend was made upon the common stock, for the sufficient reason that the Company owes several hundred thousand dollars of floating debt, which will be inereased by borrowing to pay the dividend on the guaranteed stoek and the funded debt. The fiscal year eloses Mareh 1, 1866, and the balance sheet will tben show that the eommon stoek will have nothing left for dividends for some time to come.—*N. Y. Tribune.*

A dividend of four per cent., free of Government tax, will be paid on the stoek of the Cleveland & Pittsburg Railroad Company, of date of December 15, 1865, on and after the 10th inst., at the American National Bank in New York.

The Philadelphia & Erie Railroad Co., has declared a dividend of three per cent.

A telegram from San Francisco, dated January 4, quotes Stocks as follows: Gould & Curry, $900 per foot; Savage, $760 per ft; Ophir, $325 per foot; Hale & Noreross, $275 per foot; Crown Point, $550 per foot; Yellow Jacket, $445 per foot; Beleher, $165 per foot; Alpha, $220 per foot; Imperial, $110 per share; California Steam Navigation Co, 59 per cent.; California State Telegraph Co., 26 per cent. Dividend declared on Gould & Curry, $50 per foot.

The Illinois Central for December is unofficially reported to show a decrease of $106,000 on its traffic.

Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

## Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M. |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M. |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House, Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city. ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt

WRIGHTSON & CO.

## Printers,

*167 Walnut St., Cincinnati.*

## The Old And Reliable Route.

Through to Pittsburg without Change.

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:20 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:00 A. M. | 10:40 P. M. |
| HAMILTON..... | 9:57 " | 11:43 " |
| DAYTON..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Day Trains.

Ample time is allowed, at all hours,

for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast cornor of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, } Passen Agents.
CHAS. CONK, }

## CENTRAL RAILROAD

—OF—

NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Manch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twedty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex. 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

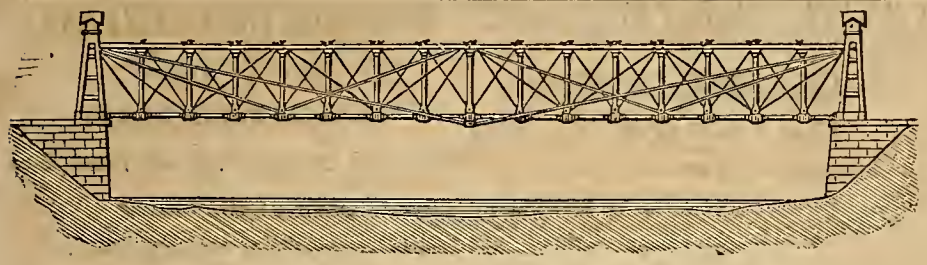
For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



(*Plan of Bridge.*)

## FINK'S PATENT

## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

**HOLENSHADE, MORRIS & CO.**

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

## SCREW BOLTS,

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

**M. W. BALDWIN & CO.**

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

## LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

## KNOX & SHAIN,

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

## FINDINGS,

AND

## MACHINERY,

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

**BUSH & LOBDELL,**

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

## Chilled Wheels and Tyres

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

**AMERICAN BANK NOTE COMPANY.**

*Bank Note Engravers & Printers.*

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

## SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

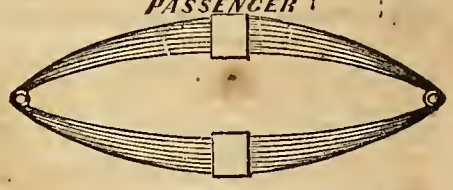
---

## RAILWAY SPRINGS.

**FREIGHT**





**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS,

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y.

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

**STOCK BROKER,**

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collections.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH, *Master Transportation, Baltimore*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City.. | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M. |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M. |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indionapolis & Cambridge City.. | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M. leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St. Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E. FOLLETT, General Ticket Agent.

W. D. GALSWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

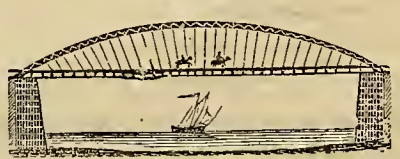
## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9.

THE SCHENECTADY

## LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore

## RAILROAD!

## FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M. (Express); 2.30 P. M.; 11.30 P. M. night.

On Sundays, 4.30 A. M.; 11.30 P. M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.44 P. M (Express

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, JANUARY 18, 1866.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

W. A. MUNSELL,
*General Agent.*


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | *Depart.* | *Arrive.* |
|---|---|---|
| Cincinnati Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:10 P. M. | 4:00 A. M. |
| Morrow Accommodation | 5:30 P. M. | 8:00 A. M. |
| Night Express | 7:00 P. M. | 3:50 P. M |
| Night Express | 10:00 P. M. | 9:40 A. M. |

MARIETTA AND CINCINNATI,

| | | |
|---|---|---|
| Mail | 5:00 A. M. | 7:30 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P. M. | 5:45 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Indianapolis & Cambridge City | 7:00 A. M. | 9:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:50 P. M. |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P. M. |
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| Dayton Accommodation | 6:45 P. M. | 9:35 P. M. |
| Dayton, Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A. M. |
| Richmond & Chicago | 5:30 P. M. | 1:10 P. M. |

CHICAGO & GREAT EASTERN.

| | | |
|---|---|---|
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " " | 5:30 P. M. | 1:20 P. M. |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Mail & Springfield Express | 2:30 P. M. | 4:30 P. M. |
| St. Louis and Chicago Express | 7:30 P. M. | 1:10 A. M |
| Lawrenceburg and Harrison Accommodation | 4:30 P. M. | 8:30 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:20 P. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R.

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M. | 4:35 P. M. |
| Caboose Accommodation | 4:00 P. M. | 8:00 A. M. |

KENTUCKY CENTRAL.

| | | |
|---|---|---|
| Express | 6:00 A. M. | 6:30 P M |
| Accommodation | 1:50 P. M. | 11:00 A. M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Morning Express | 9:40 A. M. | 6:30 P. M. |
| Night Express | 10:50 P. M. | 7:30 A M. |

### The Pacific Railroad.

There is no kind of public enterprise at this time, of half the interest with that of the Pacific Road. Few can, by any power of imagination, conceive of the vast importance of such a work, or of the revolution it is likely to make in some kinds of trade. The very best of Stage conveyances, or of Isthmus Steam Navigation, fail to give us the least means of comparison. Stage conveyances are, of course, totally inadequate to the transportation of merchandise; and the conveyance by the Isthmus too long and expensive, to make any competition with an overland railroad. The cost of a passenger going from San Francisco to New York by railroad, would not be over half the cost by the Isthmus of Panama. The difference in the carriage of merchandise would not be so great; but the difference in time, interest of money, and getting to market in season, would fully counterbalance any cheapness of water transportation. Besides, why should not a car go without change from San Francisco to St. Louis? On a road, on the same grade, and having no inclined planes,—this may be easily done. In that case, the gain in this particular would be very great over the transshipment at Panama, or Nicaragua. Let us suppose that cars are started at San Francisco, which carry passengers and merchandise, safely and early through to New York. The passenger cars, allowing full time forrest, and going at a moderate speed, would go through from ocean to ocean, or at any rate to the Mississippi, in six days. The freight cars would go in twelve days. Let us now see the effect of this on the Pacific trade.

Our present trade in tea, spices, and other articles from China, Japan, and the Islands of the Pacific, amount to about twenty millions of dollars per annum but, this is but a portion of what must necessarily be the trade across the continent, if ever the Pacific road is made. For, let us see what must be the immediate effect on the intercourse of Europe, with China, Japan and the Pacific. The Pacific is much easier navigated than the Atlantic. Let us suppose then (as there will be), packet steamers running between the principal ports of the Pacific and San Francisco, whence the merchandise of the Asiatic coasts and Islands of the Pacific will be shipped by rail for New York, and thence by Ocean steamers to Liverpool and Havre; is not that by far the shortest in point of time, and therefore the cheapest (for time is the main element in economy), between the Pacific, Asia and Europe? The difference in distance is thousands of miles, and notwithstanding all the preference usually given to the cheapness of continuous water navigation, we must believe the route over the continent will take precedence of all others. With this conviction, we are rejoiced to see that the work on the line of the Pacific Road is now commenced, and progressing with a vigor which promises speedy success. It may be interesting to our readers to trace out the progress thus far made, and the routes selected.

The 100th degree of longitude seems to be the line, on which center all the diverging lines from the East, and then to proceed on one line over the main ridges of the Rocky Mountains. From the western border of the States, that is, from Iowa, Missouri, Kansas and Minnesota, Government has provided by lands and bonds per mile, for the construction of the Road, and its several branches from the States, through the territories and lands of the United States, to the State of California. The amount of this aid is thus stated:

The roads and branches named are to be assisted by Government bonds, payable thirty years after date, bearing six per cent. interest, payable in legal currency to the United States semi-annually. In default of payment of interest on bonds by any road, the Secretary of the Treasury is to take possession of it for the benefit of the United States. These bonds are to be issued to the extent of $16,000 per mile constructed, except one hundred and fifty miles to the Rocky Mountains, and one hundred and fifty miles to the Sierra Nevada, for which $48,000 per mile is to be granted. Between these mountains, sections of one hundred and fifty miles each, bonds to the extent of $32,000 per mile are to be granted, "provided that no more than fifty thousand of said bonds," of $1,000 each, "shall be issued under this act to aid in constructing the main line of said road and telegraph."

In addition to the bonds thus loaned the companies are to receive public lands to the extent of ten alternate sections on each side of the road and within the limits of twenty miles from its line, provided said lands have not already been disposed of.

These bonds and lands are to be issued by Government at the completion of each twenty or more miles of first class road, fully equipped as such, for the service contemplated by the act, of a continuous line from the Missouri river to the Pacific Ocean.

According to the report of Col. Simpson, of the Engineer Corps, to the Secretary of the Interior, the following is the condition of the work by the several companies.

1. THE UNION PACIFIC.—This road is really authorised to build the road *west* of the 100th degree to Nevada. But it is also allowed to make the road from the western boundary, which is, we understand, the part that has actually been undertaken. The distance to the 100th parallel, from Iowa, we suppose to be about 250 miles. Of this, Col. Simpson says, 100 miles are nearly graded; a second 100 miles commenced; that 60 miles of track will be laid in the month of January; 100 miles in July, and 200 miles by July, 1867, and perhaps the 100th meridian reached. This Company have notified the Government, that forty miles of the road are complete and ready for acceptance. They have expended already three and a half millions of dollars.

2. The Union Pacific, Eastern Division.—This company is authorized to make the road from the mouth of Kansas river, and on the south side thereof, to the 100th meridian, where it will meet the Union Pacific. It is provided, however, that if this company reaches the 100th meridian first, it may go on to the West; provided, that it shall receive no bonds for the part West, till the branch from Omaha City is finished. This is for the purpose of securing a branch to Nebraska. This line, from Kansas City, has recently been undertaken by a strong company, mostly Railroad men with a cash capital, and they are going on energetically. *Sixty miles* of this road was completed on November 11th, and accepted by the President.

3. The Central Pacific.—This company is authorized to make the road from San Francisco or the navigable waters of the Sacramento, to the western boundary of Nevada, to connect with the Union Pacific, Of this, Col. Simpson says:

Central Pacific.—The work of grading commenced in February, 1863. The first shipment of iron reached Sacramento, October 8th, 1862, and the track laying was immediately commenced, and steadily continued, with a few delays caused by the non-receipt of iron and ties within the contracted time, up to June 6th, 1864, when the road was completed to Newcastle, a distance of thirty one miles. The grading between Newcastle and Colfax was very difficult and expensive, increasing as the line was pushed up the Mountain slope. The cuttings have been deeper, the embankments higher, and more rockwork encountered, as the line has gone eastward. One cut is sixty-three feet deep and eight hundred feet long, and several others are from forty to fifty feet deep and from eight hundred to twelve hundred feet in length, all of which were through rock or hard cement, requiring to be blasted. Several expensive trestle bridges have been constructed across deep ravines, some as high as one hundred feet in the center. Some of the embankments are over seventy feet high.

For several months the number of laborers procured was comparatively small, but recently they have increased more rapidly, until now five thousand and eighty men are employed, with over six hundred teams, and the prospect is that the number of laborers will be increased to six thousand during this season, and during the next year, not less than fifteen thousand. With this large force the company will be able to push on the work so as not only to complete it far within the time required by the acts of Congress, but so as to meet the public impatience.

Three other companies have been organized and accepted the conditions of the Government. One is the "Hannibal & St. Joseph" Road, authorized to make a branch from opposite St. Joseph, to meet the "Union Pacific," Eastern Division. This is progressing, and the contractors are to have the first twenty miles finished in January, 1866 (this month). Another company is also to make a branch from Sioux City, in Iowa, but no work is done. Another is the Burlington & Missouri River Company, which may receive lands, but no bonds.

From the above account, we see that three lines are progressing steadily and energetically to the 100th meridian, and that the line through California is also progressing. We now begin to see light on what is beyond comparison, the greatest enterprise of modern times. We have no doubt, that in three years the road will be completed to the Rocky Mountains, and in ten years, the whole line across the continent will be in active operation. Then will the country see the greatest inland trade in magnitude and activity ever known.

### Coal and Lumber Roads of Cincinnati.

We have several times alluded to the projected routes from this city to the coal and lumber regions of the East and North. They are:

First. A road from Richmond, Ind., running north in a straight line, through Ft. Wayne and Kalamazoo, to Grand Rapids, Mich., joining a proposed road through the Peninsula to Mackinaw. The Second starts from the intersection of the Dayton & Union at Greenville, Ohio, and runs due North, through Van Wert, Bryan, and Jackson to Lansing, thence by the Amboy & Lansing R. R. to Saginaw, and there joins the Ohio & Lake Superior R. R., to Mackinaw, Superior & Sault St. Mary, of which mention was made in our last issue.

The importance of these two routes on the future of this city, can hardly be estimated. Over them will be brought nearly all the lumber used in this vicinity, and at such rates as will greatly accelerate the building up of our waste places.

To the Zanesville road, we are to look for a supply of coal, calculated to make prices low and uniform. The Marietta R. R. Co. will yet find it their interest to use the Tunnel also in bringing coal It seems to us, that arrangements might be made whereby coal could be delivered daily to large consumers, at from 12 to 15c per bushel. This would relieve the purchaser from the expense of storing for long periods, and tend to equalize the prices of coal by river.

We need one thing more to aid these roads, and add to our traveling facilities. It is the completion of the long neglected tunnel. The rise in real estate in its vicinity consequent upon its completion would alone warrant the undertaking, and the advantages of a central depot are too obvious to need comment. Instead of waiting for "foreign capital" to undertake our improvements, and absorb their earnings, and make our city a station instead of a terminus when it suits their interest, we should emulate, if we cannot surpass, our sister cities, in that public spirit, which considers no expense too great, that conduces to commercial advancement.

All around us, the press is sounding the notes of new enterprises, and Cincinnati must awake from her lethargy or be left behind in the race of improvement. When the tunnel shall be completed, and the new coal and lumber roads are adding to our population by furnishing habitations and the means of making them comfortable, we shall be surprised that we were so long indifferent to interests so material to our prosperity.

### Caution to Travelers.

Scientific men have long been investigating a new and terrible disease that has prevailed to some extent for years, and have finally traced its production to one of our great Eastern lines of travel, which by its narrow and uncomfortable cars, and its rocky road bed, has continually produced concussion of the spine in the traveler, until the disease has increased to the alarming extent of requiring scientific examination.—*Exchange.*

The aforesaid "great Eastern line of travel" is hereby notified to remove its rails, and substitute stages for "its narrow and uncomfortable cars." If necessary, it must also be prepared to take up a tie here and there, to assimilate the old and uncommonly healthy style of travel. For those preferring equestrian exercise, an assortment of hard trotting horses may be in attendance at the stations for the benefit of *very* "spinous" individuals.

The theme is suggestive. We are reminded of another old but nevertheless terrible "disease." Those who have "gone down to the sea in ships," will remember the concussion of the stomach then experienced. Even "scientific men" have been appalled, and felt their gorges rise on such occasions. We must reluctantly admit that this is also a "great Eastern line of travel," and we appeal to our cotemporary to frown it down.

The St. Louis *Republican*, of the 4th says:

We learn that a dispatch has been received from a credible source in Washington, to the effect that the Attorney General and the Solicitor of the Treasury, have decided the law points that were at issue in the matter of the Union Pacific Railroad, in favor of John D. Perry, General Thomas L. Price, and the gentlemen who belong to their corporation. This decision, doubtless, puts completely at rest the adverse claim which has been urged by Mr. Durant, of New York, and leaves Mr. Perry and his associates to continue their work of pushing the road Westward without further obstacle. St. Louis will now inevitably be the first to secure that coveted prize—a direct railroad connection with the shores of the Pacific Ocean.

### Truss Bridges.

We have received a Comparative Analysis of the Fink, Murphy, Bollman and Triangular Trusses, by C. Shaler Smith, Civil Engineer. It is very ably written. We regret that want of space prevents a review in this number.

## Pittsburgh & Connelsville Railroad.

The Thirteenth Annual Report of this Company, which was submitted to the stockholders, Dec. 4 1865, is before us. The road has prospered under the able management of President HUGHART, and Chief Engineer LATROBE. We give the President's report, nearly in full:

We first exhibit in a condensed form the result of its operations.

GROSS EARNINGS.

| | |
|---|---|
| From Passengers,..... | $181,453 34 |
| From Freights,..... | 203,087 19 |
| From Mails,..... | 3,650 00 |
| From Miscellaneous sources,..... | 6,172 83 |
| Total,..... | $394,363 36 |

EXPENSES OF OPERATION.

| | | |
|---|---|---|
| Cost of Conducting Transportation,.. | $65,815 07 | |
| Cost of Motive Power,..... | 82,065 31 | |
| Cost of Maintenance of Cars,..... | 17,364 22 | |
| Cost of Maintenance of Road,..... | 86,981 77 | |
| General Expenses,..... | 11,775 99 | |
| | | 264,002 36 |
| Net Earnings,..... | | $130,361 00 |

Equaling 33 7-100 per cent.

EARNINGS.

The total number of passengers carried all distances was 366,833, and the revenue $181,453.34, an increase over the previous year the latter of $36,042.63, or 24 78-100 per cent.

The freight transported all distances was 220,214 tons, and the revenue therefrom was $203,087-19, an increase over the previous year of 20,662 tons, or 10 35-100 per cent.—in revenue, of $42,147.67, or 26 18-100 per cent.

The mail earnings are $3,650, as previous year.

The item of revenue from miscellaneous sources is composed of amounts paid the Company for labor performed at the shops, sale of old material, &c.

Of the *gross revenue*, the main division of the road between Port Perry and Connellsville earned $256,771.38—an increase of $50,827.38, or 24 68-100 per cent. over the previous year; the Turtle Creek Division, $113,412.14—an increase of $24,270.81, or 21 40-100 per cent,; and the Fayette County Road, $24,179.17—an increase of $3,343.17, or 14 per cent.

The earnings per mile run by trains this year were $1.44 62-100, against $1.00 18-100 last year—being 26 62-100 in favor of this year.

WORKING EXPENSES.

The cost of Conducting Transportation has been $65,815.07, or 24 cents per mile run by trains, which is $15,691 71, or 9 4-10 cents per mile run more than last year.

The Maintenance of Road-Bed and Bridges cost $86,981.77 or $1,208 per mile for seventy-two miles. The previous year it was $859 per mile.

The cost of these repairs per mile run by trains was nearly 32 cents, being 7⅔ cents per mile more than during 1864. This increase is due to the large amount of new iron, ties, &c., placed in the track during the year, as hereafter more fully explained.

The Motive Power, including Repairs of Engines, Fuel, Oil, Stores, Wages, &c., has cost $82,065.31, or 30 cents per mile run, being 2 18-100 cents per mile more than the previous year.

The enormous length and weight of the loads hauled during the year, has rendered the frequent stoppage of trains at way stations for delivering small amounts of freight, very expensive to the Company. This local business would have swollen many fold beyond its present value, had it been in our power to provide an engine for its special accommodation. What we have done has served to increase expenses in far larger proportion than revenue. When it is considered that the tonnage and passenger service has been performed by nine locomotives, the expense of their maintenance will be acknowledged as far within what might have been expected.

The Maintenance of Cars has cost $17,364.22, or 6 36-100 cents per mile run by locomotives, being 1 6-100 per cent. less than last year.

The General Expenses of Administration have been $11,775.99, or 4 32-100 cents per mile run, which is $1,800.50, or 98 cents per mile run less than last year.

The total cost of Maintenance, Working and Administration this year has been $264,002.36, or 97 cents per mile run by trains, against 78 64-100 cents per mile in 1864.

The work done in Passengers and Freights is, however, 10 35-100 per cent. greater than last year, which, with the renewal of so much of the track, will fully account for the increase.

The ratio of Current Expenses to Gross Receipts this year is 66 93-100 against 66 43-100 last year, leaving 33 7-100 per cent. net gain against 33 57-100 per cent. last year, which is less favorable only by one-half of one per cent.

That the cost of operating the road should be greater than the previous year is accounted for by the increased mileage of the trains, and the further fact that, during this year, prices of material of all kinds and of labor advanced largely, and reached the highest average point known in the history of the Company; yet the Directory have been debarred by cogent circumstances from making any corresponding advance in the rates of transportation.

But that which has most seriously increased the expenses has been the condition of the road-bed, and the necessarily large amount expended thereon, involving as it did a thorough and complete renovation.

The financial difficulties of the country and of the Company had rendered the undertaking this work a matter of impossibility to the previous administration; but the winter immediately following the entering of this Board upon their duties proved the most trying and disastrous upon all the roads of this country that ever had been known. During the first three months, accidents of greater or less importance occurred daily. Some portion of the motive power was required to be in the shops every night for repairs, and was constantly deteriorating, from the utter impossibility of maintaining them under these circumstances. And hence the largely increased expenditures under this head. A careful and most minute examination upon the part of your Engineer and of the Road Committee, through its chairman, revealed the fact that the great weight of our freight engines, the heaviest in use, and the nature of so large a proportion of our traffic—coal, limestone, iron, and coke—required an immediate and thorough repair of a large proportion of the whole of the line from Port Perry to Connellsville. It was resolved to proceed upon this work at once, and we are happy to be able to announce rapid and satisfactory progress, though a considerable amount yet remains to be done. The cost of the large quantity of new iron necessary for this work could not be diminished to any material extent by the sale of what was taken from the track, as that was used to build sidings absolutely necessary—there being only two upon the road of sufficient length to permit the passage of freight trains. The prices of iron ranged from $130 down to $85 per ton; cross-ties, from 45 cents to 60 cents each.

These expenses have also been very largely increased by the occurrence of two most serious events.

On the first day of August, a portion of the cliff in the rear of Everson, Preston & Co's. mill fell, burying the road-bed for one hundred and thirty feet in length, and forty-five feet in depth, with a breadth of eighty feet, including slopes. This was composed, in large part, of huge masses of stone, required to be laboriously cut and blown in pieces, and to be hauled away in fragments to a considerable distance. The unremitting labor of from eighty to a hundred men, for fifteen days and nights, permitted the passage of a train on the morning of the 16th; thus not only involving a heavy direct expenditure of money, but also depriving us of the use of the road at a period when our business was more active than had ever been known before.

The second event was in the nature of a water-spout, which swept away the southern abutment of the bridge at Mount's Creek, and the northern of that at Laurel Run, with the entire superstructure of both, and also washing away an arched culvert at Dawson station, here making a clean breach in the road of about sixty feet in length by sixteen in depth. These bridges are now being restored and the new work will be of such permanent character as most probably to prevent the possibility of a recurrence of the accident.

It is absolutely necessary that the remainder of the fallen material be removed from the rear of the rolling mill, and also that a portion of the wall and of the eastern end of the cliff be taken down at the earliest possible period.

WORK PERFORMED BY THE MOTIVE POWER, &C.

The number of miles run by locomotives has been 272,688, carrying 366 833 passengers an average distance of 15 5 miles—equivalent to 78,921 over the whole 72 miles of the road, or 5,682,294 one mile. Of these 203,296 traveled eastward, and 163,537 westward.

The freight transportation was 220,214 tons of 2,000 lbs., 27,527 tons passing eastward, toward Connellsville, and 196,687 westward, towards Pittsburg, the westward bound freight being thus 7.1-9 to 1.

The work of the previous year was 256,176 miles by locomotives, carrying 395,843 passengers an average distance of 11.6 miles, equal to 64,097 over the whole road, or 4,615,024 one mile. The freight was 199,552 tons, an average distance of 28½ miles, equivalent to 79,346 tons over the whole road, or 5,712,879 tons one mile. The proportion of westward to eastward bound freight in that year was 10¼ to 1.

ACCIDENTS.

We have again to report that no passenger has been fatally or even seriously injured during the year, and no hurt of any kind has occurred to those retaining their proper place within the cars

Several of the employees have been seriously, and two fatally injured, but in no case has the cause been other than their own carelessness or recklessness.

We have had but one instance of a collision, and in that no damage at all resulted to passengers or employees, and but little to engines or cars.

FINANCES.

In the last Annual Report, the Floating Debt was reported by the Treasurer in the General Account to be $69,233 58. The same account for the year just closed shows it to be $64,207.43.

Adding certain accounts payable not represented on Company's books, and deducting amounts in hands of Treasurer and Agents, together with the cash value of bonds and other assets, pledged for part of the above, we have $39,672.38 as the true amount of the Floating Debt of the Company. Besides the assets above deducted and not included, we still hold $52,900 in bonds of the borough of M'Keesport.

The Floating Debt, excepting the interest due the city of Baltimore, is now no longer a matter of inconvenience to the Company, but, if necessary, can easily be paid during the coming year, should the business bear any reasonable proportion to that of the past.

There has been nothing paid upon the interest debt alluded to, except the first installment of Sinking Fund, which, with its accumulated interest, now amounts to about $20,000. It is hoped, however, that some satisfactory arrangement may be made during the coming year, by which the city may be induced to resume her position of leniency so long held toward us. Meanwhile the security for its ultimate payment is being every year strengthened by the faithful application of the net earnings to the equipment of the road and such needed improvements as will tend to the development of its business, and the enhancement of its prosperity.

As before shown, the net income for the year just past was $130,361. This has been expended as follows:

FOR CONSTRUCTION AND EQUIPMENT.

| | | |
|---|---|---|
| New Locomotive Engines, on acc't, | $34,783 63 | |
| Coal and Coke Yards, | 5,205 60 | |
| Dep't Buildings, | 1,825 86 | |
| Freight Cars, | 8,380 45 | |
| Passenger and Baggage Cars, | 4,491 44 | |
| Graduation, | 147 05 | |
| Road Superstructure, | 10 50 | |
| Machine Shops and Engine Houses, | 3,896 45 | |
| Shop Machinery, | 267 61 | |
| Water Stations, | 998 14 | |
| | | $60,011 74 |
| Coupons Turt'le Creek Bonds, | | 26,755 15 |
| Right of Way, | | 1,635 87 |
| Real Estate, | | 6,041 44 |
| Interest on Stock, | | 67 21 |
| Engineering | | 913 35 |
| Taxes—U. S. Governments, | $10,436 54 | |
| State, County, &c, | 3,995 98 | |
| | | 14,432 52 |
| Interest on Floating Debt, | | 2,805 11 |
| Profit and Loss, | | 1,191 76 |
| Insurance, | | 500 00 |
| Baltimore City Loan—balance in full, | | 2,323 75 |
| Paid other Items of Floating Debt, and balance in hands of Treasurer and Agents, | | 13,680 10 |
| Total, as above, | | $130,361 00 |

The object of this statement has been, as heretofore, not to make an accurate exhibit of expenditures, but to account for all net earnings; other payments having been made from moneys received from other sources—all of which appear at large in the Treasurer's statement.

The payments on account of locomotives, and passenger, baggage and freight cars, were partly from those delivered to the Company in the previous year.

CONSTRUCTION AND EQUIPMENT.

We have added one ten-wheel locomotive to the Company's equipment; have built at Pittsburgh and West Newton, houses for three locomotives; having also built a new turntable of largest size at M'Keesport, a new station house at Watt's station, several new sidings, large additions to the coal and coke yards, and many other indispensable improvements.

FUTURE PROSPECTS OF THE ROAD.

The Board beg leave to congratulate the Stockholders upon the resumption of the work of construction.

The Sand Patch Tunnel has been placed once more under contract, and it is hoped and believed that we will be able to let the remainder of the line, and that there will be no cessation until its entire completion to Cumberland. The only hindrances which offer any serious obstacle are those which may possibly flow from our legal difficulties. Of the condition of these we would report:

The suit of the City of Baltimore remains in the same condition as at the last Annual Report. It has not been pressed as yet to a judgment, and we hope may not be. The application of the Company's net earnings to the increase of equipment and other preparations for business, is not only justified by sound principle, but in our case has the additional merit of necessity. *We have no capital from whence to draw the funds for these prime necessities,* and consequently must look to earnings, *and these must be procured or else abandon the working of the line.* This would be far more injurious to the interests of our creditors than any temporary use of the money,

The Attorney General of this State has filed a writ of *quo warranto* against us at Harrisburg, involving our right to any portion of our franchises. Why he should have attacked the completed portion of the line which was built under its own separate charter cannot be surmised. It was urged upon him to permit the suit now pending in the United States Court to be the settlement of the whole question, as the ground of complaint in the two are identical This he refused, and is now pressing his case. Strong in the justice of our cause, we have no serious fear of any ill results.

On June 20th, at Williamsport, our case in the United States Court was argued upon demurrer, before Judges Grier and M'Candless, and resulted in a triumphant vindication of the clear principles of right and justice—which had been so grossly violated in our case.

The defendants were, however, permitted to withdraw their demurrer and answer over within thirty days, and were required to charge in their answer any act of misuse or abuse which had been committed by this Company—upon which charges an issue was to be granted and opportunity given to make proof. The time was extended, yet when it appeared we could find in it no such allegation. Consequently the case was set for hearing upon hill and answer, and was argued at Philadelphia on the 23d of November. The decision upon this argument has not yet been rendered, but we do not doubt a full confirmation of the principle enunciated at Williamsport.

BALTIMORE & OHIO RAILROAD COMPANY.

By a timely loan of $33,000 in cash, we were enabled to purchase machinery without which the road could not have been successfully operated. They have also furnished us the aid of the most eminent counsel in the United States to assist in the trial of our several suits.

It is by their aid, also, that we have been enabled to begin once more the work of construction upon the extension of our road.

OFFICERS.

*President*, Wm. Oden Hughart, Pittsburgh.
*Chief Engineer*, Benj. H. Latrobe, Baltimore.
*Secretary and Treasurer*, Jno. H. Page, Jr., Pittsburgh.
*Superintendent*, Wm. B. Stout, Pittsburgh.

Directors.—Wm. Oden Hughart, G. L. B. Fetterman, John Fleming, William Phillips, William Baldwin, Joseph Pennock, Pittsburgh, Pa; Cyrus Meyers, Somerset, Pa; Benjamin Deford, John A. Thompson, Johns Hopkins, Joseph R. Marston, W. W. Taylor, Baltimore, Md.

## Cleveland & Pittsburg Railroad Annual Meeting.

The Annual meeting of the Cleveland & Pittsburg Railroad stockholders was held at Cleveland, Ohio, on the 3d inst. The report of the Directors was read, from which we select the following:

*To the Stockholders of the Cleveland & Pittsburg Railroad Company:*

The Directors, in accordance with custom and the charter of the Company, present their annual report of the condition of the Company and the operations of the road for the year commencing December 1, 1864, and ending November 30, 1865.

The result of the business done upon the road will appear from the following tabular statement:

| | |
|---|---|
| Receipts from passengers | $1,029,065 60 |
| Receipts from freight | 1,559,584 06 |
| Receipts from Pittsburg, Ft. Wayne & Chicago Railway Company, our share surplus earnings | 148,113 43 |
| Receipts from rents and miscellaneous sources | 97,727 86 |
| | $2,844,490 95 |

CONTRA.

| | |
|---|---|
| Paid for expense of motive power and cars | $734,749 82 |
| Paid for maintenance of ways and structures | 575,035 35 |
| Paid for the expense of transportation and for general expense | 649,798 39 |
| Balance | 884,907 39 |
| | $2,844,490 95 |

Out of this balance has been paid:

| | |
|---|---|
| Interest on mortgage bond and other indebtedness | 288,266 78 |
| Dividend of February 1 1865 | 212,729 25 |

and the remainder, excepting the balance on hand, has been expended in the purchase of new equipment and the payment of rent on the lease from the Pittsburg, Fort Wayne & Chicago Railway, as follows:

| | | |
|---|---|---|
| The balance of net earnings as appeared by report of last year was | | $348,465 91 |
| Add to this the balance from this year's business | | 884,907 39 |
| | | $1,233,373 30 |
| Deduct interest paid | $288,266 78 | |
| Deduct rent to Pittsburg, Fort Wayne & Chicago Railway Company | 85,000 00 | |
| Deduct dividend paid | 212,729 25 | |
| Deduct new equipment | 341,121 43 | |
| | | 927,117 46 |
| | | $306,255 84 |

Which is the balance of net earnings account, as will appear in the financial statement.

The increase in the expenses of operating the road is large, amounting to $453,249 07. The details will be found in the report of the Superintendent. This increase, so far as relates to motive power and cars, the mainte-

nance of way and structures, is owing in part to the increased cost of materials and labor, and in part to the more extensive repairs which have been made upon the track. The actual increase in these items and others will appear from the following statement of increased expenses over those of the previous year:

INCREASED EXPENSE.

| | |
|---|---|
| For motive power and cars | $129 249 53 |
| For maintenance of way and structures | 85 590 12 |
| For taxes | 65,935 09 |
| For casualties | 59,500 95 |
| For joint account with Pittsburg, Fort Wayne & Chicago Railway Company | 53,087 22 |
| For general account | 59,886 16 |
| | $453,249 07 |

The casualties, which have been paid for, during the past year, grew out of the loss of a passenger train at Hudson, December 23, 1864, and of a freight train at Jeddo, January 25, 1865.

We have included in the receipts the amount of $149,113 43 paid to this company by the Pittsburg, Fort Wayne & Chicago Railway Company, which is our proportion of the joint earnings of the two roads beyond what was received directly by this company. It will be remembered that by the arrangement entered into between the through companies, each company retained its earnings, but a quarterly adjustment is made and a division of the gross earnings of the two companies, in the proportion of 73½ per cent. to the Pittsburg, Fort Wayne & Chicago Railway Company, and 26½ per cent. to this company. In case either company has earned more than this proportion, the same proportion of the surplus is paid to the other company.

This arrangement has been in operation for two years and a half, and the result thus far has shown its substantial fairness.

The actual result of this division of earnings from its commencement to the present time is full of interest.

The Pittsburg, Fort Wayne & Chicago Railway Company paid to this company as follows:

| | | |
|---|---|---|
| For quarter ending | June 30, 1863 | $10,834 29 |
| " " | Dec. 31, 1864 | 60,297 49 |
| " " | March 3, 1865 | 135 079 72 |
| " " | June 30, 1865 | 61.039 62 |
| | | $267,251 12 |

This Company paid to the Pittsburg, Fort Wayne & Chicago Railway Company as follows:

| | | |
|---|---|---|
| For quarter ending | September 30, 1863 | $78,455 18 |
| " " | December 31, 1863 | 22,421 41 |
| " " | March 31, 1864 | 12,647 18 |
| " " | June 30 1864 | 32,710 06 |
| " " | September 30, 1864 | 53,975 58 |
| " " | September 30, 1865 | 21,617 76 |
| | | $221,827 70 |

This statement shows that during the two and a half years of the working of this contract, the Pittsburg, Fort Wayne & Chicago Railway Company have paid to this Company $45,432 92 more than they have received from us—a less amount than was anticipated by your Directors when this arrangement was commenced, in view of the considerations which have been already presented.

The financial condition of the Company is, in a high degree, satisfactory.

The following is a condensed statement:

DEBTOR.

| | | |
|---|---|---|
| Construction | $9,201,464 40 | |
| Machinery and tools | 69,984 06 | |
| Personal property | 31,799 97 | |
| Telegraph line | 16,913 72 | |
| | | $9,320,162 75 |

ASSETS.

| | | |
|---|---|---|
| Balance in Treasurer's hands | $176,829 22 | |
| Lawrence Railroad and Transportation Company Stock | 10.000 00 | |
| Bills receivable | 12,230 67 | |
| Shop materials | 131,929 39 | |
| Net balance personal accounts | 23,755 45 | |
| | | 354,144 73 |
| | | $9,674,307 48 |

CREDITOR.

| | | |
|---|---|---|
| Capital stock | $5,391,325 00 | |
| Stock scrip | 12,585 74 | |
| | | $5 403,910 74 |
| 2d Mortgage Bonds | | 1,129,000 00 |
| 3d " " | | 1,619,500 00 |
| 4th " " | $1,696,000 00 | |
| 4th Mortgage scrip | 12,123 55 | |
| | | 1,108,123 55 |
| River line Bonds | | 4,000 00 |
| Dividend Bonds | | 16.725 00 |
| Income Bonds | | 3.500 00 |
| Bills payable | | 83 202 35 |
| Net earnings | | 306,255 84 |
| | | $9,674.307 48 |

It will be seen by comparing this financial statement with the statement of last year, that the mortgage indebtedness has been reduced $137,616 26, and the unsecured indebtedness $59,141 65. The mortgage indebtedness is now only $3,860,623 55, and the unsecured indebtedness is so small that it could be paid at any time. No debts are unpaid which are due, and all the engagements of the Company continue to be promptly met.

After the reading of the report, an election for Directors was held, which resulted as follows:

J. N. McCullough, Wellsville; P. F. Geisse, Wellsville; James F. Clark, Cleveland; T. P. Handy, Cleveland; D. C. List, Wheeling; S. Harbaugh, Pittsburg; B. F. Jones, Pittsburg; H. C. Kingsley, New Haven; Smith Cliff, New York; J. D. F. Lanier, New York; F. F. Randolph, New York; W. W. Holloway, Bridgeport.

At a subsequent meeting of the Directors, the following officers were chosen for the current year:

*President*—J. N. McCullough.
*Vice-President*—W. W. Holloway.
*Superintendent*—J. H. Devereaux.
*General Ticket Agent*—F. R. Myers.
*Auditor*—R. F. Smith.
*Secretary*—Geo. A. Ingersol.

### A Patent Well.

Among the most recent American inventions is a patent well. The process is so simple, and yet so effectual that it must come into general use at once. An iron tube is driven straight into the ground, just as one would drive a stake, and on reaching a depth at which any well would find water, averaging about twenty feet, and often less, a pump is attached to the end of the tube remaining above ground, and up comes the water.

### German Railways.

On railroads in Wurtemberg tickets pass passengers only for the day on which they are purchased, which they claim is a great safeguard against embezzlement. Stopping over is tolerated only, if notice is given to a station agent, and he stamps the ticket as testimony in point. They have a rule, by which on paying for a first class ticket and traveling in a second class car, one may go and return to the desired place. Such return tickets are much used; they pass for two days. The fare in the second class is about equal to two cents a mile for passengers having baggage to pay for; for those traveling only with a hand valise or carpet bag, it is much less. Second class cars are as good as the best cars in America, and far more comfortable, as one is never annoyed by disagreeable passengers.

(From N. Y. Tribune.)

### Diminished Earnings.

The decrease in railway earnings which has recently been exhibited in the December returns is the more significant on account of the open Winter, and the consequent late period of the close of navigation. Had navigation closed earlier than usual, the roads leading from the West to Lake ports would have suffered in a comparison from very obvious and simple causes. In the present case, however, the fact of decreased earnings is remarkable, and leads to the belief that we are upon a period during which our railways are to undergo for a time a period of diminishing prosperity, if not of absolute adversity. For nearly four years we have witnessed a constant and large increase of traffic over every line of road in the North, and especially on lines running east and west. So great has been the pressure of business that scarcely any of the roads could furnish equipment and motive power sufficient to keep pace with the growing traffic. One great cause of this was the closing of the Southern markets and the obstructed navigation of the Mississippi River. The opening of the river while chaos reigned at the South had but little effect; but now that business has been somewhat restored, and is seeking its natural and most available outlets, we must expect to see a very large diversion of freight business from our East and West Railway lines to the Mississippi River. This is not conjectural: it is as certain as any mathematical demonstration can be.

Another cause of diminished railway earnings may be found in the cessation of Government business, which, in the transportation of troops, of cattle, provisions, and munitions of war, gave to our railways a very large and lucrative trade. For these reasons, which to us seem well founded, we anticipate in the present year a large decline both in the gross and net earnings of railways; and while believing that eventually these troubles will be removed by progress and development, we hold it to be wise to admit facts palpable and self evident.

### Condition and Prospects of the Texa Railroads.

Mr. Lockridge, a representative of the railroad interests in Texas, has arrived in Kansas City on a mission to the President of the Kansas City, Fort Scott & Galveston Railroads, with a view to the speedy completion of that road with its Texas connection. The people of Texas are fully alive to the importance of the improvement, and hope that it will soon be completed. Mr. Lockridge says that the hope of speedy railroad connections with the North West and the resumption of railway traffic and travel is certain.

### Platte Country Railroad.

We have already announced that Governor Fletcher has seized the Platte Country Railroad, as having been forfeited to the State. Its seizure has caused considerable fluttering among those who have been so long contending for the prize. We now see that it is advertised to be sold at the Court-house door, in St. Joseph, Missouri, on the 21st day of April next. The State is in full possession of the road, General Madison Miller acting as the Agent and Trustee of the State.—*Missouri Democrat.*

### Prevention of Accidents on Railways.

The exhibition of inventions and improvements for insuring the safety of railway traveling has since its opening at the Polytechnic Institution, been considerably increased, other models of breaks and signals having been daily added to the collection.—Among the former the most prominent is that of M. Ch. Boutet, which, no doubt on account of its importance and of the space which it takes up, is not to be found in the room devoted to the purposes of the exhibition, but occupies nearly the whole length of the principal gallery to the left of the diving-bell.—The line of rails, representing a steep incline, is at least sixty feet in length; and the carriages which compose the train are exact models of those running on our railways in the proportion of one in twelve. This train is made to travel down this incline with all the momentum which such a disposition of the line would create, and the speed is often accelerated, and the momentum increased, by a strong push from behind at the moment of starting. These conditions would appear to be most unfavorable to the quick stoppage of a train; but as M. Boutet's system consists in borrowing from the train itself the force necessary for the working of his breaks, it follows that, the quicker the speed, or the heavier the train, the sooner will the stoppage be effected. We have seen this little train loaded with iron weights twenty times heavier in proportion than an ordinary one would be made to carry, and, when running at full speed down the incline, it was stopped almost instantaneously by the mere touching of a lever placed at the back of the last carriage. The inventor then causes the train to run off the rails, and before it has proceeded a few inches it is brought to a complete stand-still. He also simulates the rupture of the coupling bars, and his breaks act automatically, and with such promptitude, that no sooner has the rupture taken place than the two disconnected parts of the train become as it were suddenly paralyzed. We are sorry that our space will not allow of a detailed description of M. Boutet's apparatus, which is so simple in its conception, and so easy in its application, that its adaptation to the present railroad carriages will not necessitate the slightest alteration in their construction. It consists chiefly of a clutch-box encircling the axle, one part of which is fixed to the nave of the wheel, the other, which is movable, being suspended from the frame work of the carriage, so as not to fatigue the axle by continual friction When it is required to throw these into gear, a simple pressure of the lever to the right or to the left, according to the direction of the train, will cause the movable part to work itself into the fixed part, when it will have to revolve with the axle. A chain terminated by a long iron rod is then wound half a turn round this clutch-box, and the rod, which is attached to a cross-piece bearing the break blocks opposite to the front wheels of the carriage, brings these to bear on them with such force that they are locked before they have completed another revolution. This effect is repeated throughout the whole train by means of chains of communication; and, as said above, should this break, in consequence of the rupture of the coupling bars, the stress it would have to undergo before parting would at once throw every apparatus into gear. It must be noticed that the application of the breaks, although it appears simultaneous, is effected in succession, beginning at the last carriage of the train, the wheels of which are partly or completely locked before the preceding one is worked upon, and so on to the head of the train. The carriages, as their wheels become locked, form so many dead weights and impediments to the further progress of the train, and the most important point of all results from this, viz.: that this very system of successive action from the last wagon to the first completely does away with all possibility of a sudden jerk to the carriages, so dangerous to life and limb, and which has hitherto been the insuperable obstacle in the way of effecting a quick stoppage. A glass full of water has been placed on the train, and, on its sudden stoppage, not a single drop was spilled. One guard is sufficient for a whole train, as the breaks are released with the same promptitude and ease as they are applied, by merely replacing the lever in position. M. Boutet affirms that his invention may be applied to the existing rolling-stock at a charge of £5 or £6 per carriage, and that it will not require more than one apparatus for every five carriages; thus a train of twenty carriages may be provided with this extraordinary break-power at a comparatively very small outlay. M. Boutet, we understand, intends very shortly to prove the efficiency of his invention on some of our principal lines. Extreme simplicity in his mechanical contrivances seems to be the secret of M. Boutet's success; and this is again evidenced by his system of signals, which depends upon the train itself for their safe working. The signal-posts are supposed to be a mile apart, and communicate alternately with one another—1 with 3, 2 with 4, &c. When the train leaves a station, a disc concealing a reflector on post 1 is pushed aside, communicating the same movement to the disc on post 3, and both remain in that position until the train passing the latter replaces the disc over the reflector, and post 1, which has been acted upon in the same way, thus points out to the station-master that the line is clear for two miles at least; and so on with posts 2 and 4, &c: so that a train may be said to telegraph its own position on the line, and to cover itself for a distance of two miles both in front and behind. The plan is very simple and most effective, and both the break and the signal deserve earnest attention from the proper quarters.—*Appletons' Railway Guide*

### From San Francisco.

By telegraph on the 13th inst., we have the following items:

The citizens of Portland are enthusiastically in favor of a wagon road to Montana Territory.

A dispatch from Seartle says a proposition is soon to be submitted by the Government to open steam communication between Victoria and San Francisco.

Steam communication with Honolulu opened to day, by the sailing of the steamer Ajax.

Dr. Angus Smith, when traveling in a railway carriage, collected some of the particles of dust which floated in the air and which seemed to shine with a metallic luster. On examination Dr Smith found that the larger class were in reality rolled plates of iron which seemed to have been heavily pressed and torn up from the surface. Another and smaller class were less brilliant, and when looked at with considerable power showed many inequalities of surface. Probably these were the particles which were not torn up but rubbed off.

### Monthly Report of the Louisville & Frankfort and Lexington & Frankfort Railroad Companies.

We are indebted to Wm. Mahl, Esq., Chief Clerk of the above roads for the following statement of their operation for the month of November:

EARNINGS.

| | |
|---|---|
| Number of passengers carried | 21,210 |
| Number of passengers carried 1 mile, | 711,621 |
| Number of miles run by passenger trains | 11,180 |
| Earnings per passenger carried one mile | 4.82-100 cents. |
| Earnings per mile run by passenger trains | 307.11-100 cents. |
| Number of tons of freight hauled | 7,009 |
| Number of tons of freight hauled one mile | 392,401 |
| Number of miles run by freight trains | 6,764 |
| Earnings per ton of freight hauled one mile | 5.38-100 cents. |
| Earnings per mile run by freight trains | 312.21-100 cts. |
| Total earnings per train mile, | 311.30-100 cts. |

| | Cost per Revenue Train Mile. Passenger. | Freight. | Total. |
|---|---|---|---|
| | CENTS. | CENTS. | CENTS. |
| Conducting Transport'n, | 19 57-100 | 52.45-100 | 31.96-100 |
| Motive Power | 150.92,100 | 168 19-100 | 157.43-100 |
| Maintenance of Way | 62,41-100 | 63.23.100 | 62.73-100 |
| Maintenance of Cars | 12 14-100 | 32.03 100 | 19.64 100 |
| General Expense | 8.77-100 | 9 08-100 | 8.88-100 |
| Total | 253.83-100 | 324.98-100 | 285.64-100 |

| | Cost carrying 1 Mile. 1 Pas'ng'r. | 1 Ton F't. |
|---|---|---|
| | CENTS. | CENTS. |
| Conducting Transport'n | .31-100 | .90-100 |
| Motive Power | 2 36-100 | 2.90-100 |
| Maintenance of Way | .98 100 | 1.09-100 |
| Maintenance of Cars | .20-100 | .55 100 |
| General Expense | .14-100 | .16-100 |
| Total | 3.99-100 | 5.60-100 |

| | |
|---|---|
| Cost of engineering and firing, per mile run | 7.90 100 cts. |
| Cost of watching and cleaning, " " per mile run | 1.11-100 cts. |
| Cost of oil, waste, and tallow, per mile run | 1.42-100 cts. |
| Cost of repairs, one mile run | 58.01-100 cts. |
| Cost of wood, " " | 17.85-100 cts. |
| Cost of water supply, one mile run | 1.18-100 cts. |
| Total | 87,47-100 |

| | |
|---|---|
| Number of miles run by pas'nger cars, | 36,703 |
| Number of miles run by freight cars | 82,314 |
| Number of miles run by locomotives | 22,560 |
| Number of gallons of oil used | 152⅞ |
| Number of pounds waste used | 249 |
| Number of cords wood used | 805¼ |
| Number of miles run to pint of oil | 18.4-10 |
| Number of miles run to cord of wood | 28 |
| Cost of passenger car repairs, per mile run | 3.05-100 cts. |
| Cost of passenger car repairs, per passenger carried one mile | .16-100 cts. |
| Cost of freight car repairs, per mile run | 2.45-100 cts. |
| Cost of freight car repairs, per ton of freight hauled one mile | 51-100 cts. |

Wm. Mahl,
*Chief Clerk.*

### The Great Railroad Suit.

*The Application for Injunction against the Atlantic and Great Western Railroad—Proceedings Commenced.*

PHILADELPHIA, Jan. 11.

To day, before Justice Reed, in the *nisi prius*, in the case of the Philadelphia and Erie and Pennsylvania Railroads versus the Catawissa, Western Central, and the Atlantic and Great Western Railroad came up. The counsel of the Reading Road applied to be made a party to sustain the respondents. The case grows out of the proposed broad guage road which the respondents have contracted to build or create by means of connecting roads. The complainants ask fur an injunction, declaring that the contract of October 31st, 1865, is at an end, and that it be delivered up and canceled.

Mr. Cuyler offered the argument on behalf of the complainants. He referred to the provisions of the act of March 24, 1865, under which the defendants claim to exercise the privilege. It was not a special act which authorized the consolidation. The complainants entertained the view that under the general law of 1840, there could be no evidence of consolidation except by the certificate from the office of the Secretary of the commonwealth.

The object of the respondent is to construct a great through route between the far West and New York, although it is agreed that Philadelphia may have a few crumbs of business. The whole scheme has been carried through by picking up little local charters which were intended for roads purely local in their character, and the present step or effort to get across the State of Pennsylvania, is to leave the Catawissa Railroad, whereby the parties have to get from Milton across the state, connecting with the Eastern Pennsylvania Railroad, and there by the Morris and Essex Railroad get into New York.

PHILADELPHIA, Jan. 12.

In the case of the Pennsylvania Railroad versus the Atlantic and Great Western Railroad, to-day, Mr. Biddle, for the respondents, read the affidavits of Thomas W. Kennard, Engineer-in-chief of the Atlantic and Great Western Company, showing that the route to New York, via the Western Central and Lewisburg, is 100 miles shurter than the present route to New York used by the Atlantic and Great Western Company, via Salamanca, over the New York and Erie Railroad.

### Michigan.

In Congress, Jan. 8.

In the Senate, Mr. Chandler presented the following:

A resolution of the Legislature in favor of a grant of land to the Detroit and Lake Superior Telegraph Company, to aid in the construction of a telegraph line from the Saginaw River to Mackinaw, thence to Saut Ste. Marie; referred to the Committee on Public Lands.

In the House, Mr. Beaman presented the following:

A joint resolution of the Legislature, asking an appropriation of land to aid in the construction of a railroad from Escanaba to Mackinaw; referred to the Committee on Roads and Canals.

A joint resolution asking for a donation of land for the construction of a telegraph line between Saginaw River and Sault Ste. Marie; referred to the Committee on Public Lands.

[From the Mobile Tribune.]

### Railroad Express Company.

We learn from good authority, that the railroad men in the South and South-west have agreed to organize throughout the South and South-west, with lines extending north to the Canada frontier, a railroad express company. The Alabama Legislature, at its recent session granted them a charter under the name and style of the Union Express Company. The corporators are all prominent railroad men. Eleven thousand miles of railroad have already been pledged to the enterprise, and we hope to see the institution organized and put into operation at an early day. For the country at large we hope for material benefits from this union of railroads, and we have no doubt that there will be a great impetus given to the express business by this arrangement. One thing we are satisfied every merchant in the country will be pleased to hear, and that is, that by adopting (as the originators of the Union Express propose to do) a general freight tariff—say, for instance, from New York to Mobile, we may expect a considerable reduction from the present exhorbitant charges by the various inland routes. Cars will be freighted at any one point and taken to another without a transfer, thus saving the time and expense usually attending the transfer of freight from one train to another. It will be carried through by passenger trains, enabling us to get goods through from the St. Lawrence to the Gulf of Mexico in five or six days. Three lines of railroads from the Ohio and Mississippi Rivers to New York, have gone into this railroad union, thus insuring the Union Express Company close and speedy connections between all important points in the United States.

### St. Louis, Jacksonville & Chicago R. R.

The recent completion of the above named railroad to Jacksonville is a matter of considerable importance to St. Louis, as it affords the citizens of the finest and best cultivated portions of Illinois opportunities for daily intercourse with us, and insures them reliable means of transportation to market for their immense surplus products.

Mr. T. B. Blackstone, President of the Chicago and Alton Railroad, is the contractor for building the Jacksonville road, and, despite the difficulty and expense attending the providing of labor, Mr. B. pushed the work forward with unexampled energy and vigor, making good his prophecy that he would run an excursion train over the road to St. Louis on January 1st. On that day a special train of ten passenger cars arrived at East St. Louis on time, under charge of that most agreeable and genial gentleman, Conductor Mallory.

The passengers represented the best and oldest families of Jersey, Green and Morgan counties, many of whom had "staged it" between their homes and St. Louis for thirty years and upward. Among them we noticed Hon. D. M. Woodson, of Green, and William Shephard, of Jersey, the first and second Presidents of the road; Mr. Strott, the present President; Mr. Blackstone, contractor; Mr. Beekman, Superintendent; Mr. E. S. Greenleaf, General Freight and Ticket Agent; Hon. C. D. Hodges, of Carrolton, and other old settlers.

The length of the Jacksonville Railroad as now completed from Petersburg to its junction with the Chicago & Alton Railroad near Monticello, is 80 miles. It presents to travelers and shippers a short, cheap and expeditious winter route to Hanibal, Quincy and Keokuk. —*Missouri Republican.*

### Vincennes & Indianapolis Railroad.

A large number of citizens of Indianapolis, interested in the construction of the projected Vincennes & Indianapolis Railroad, met at the Court house at Indianapolis on the 12th inst.

After considerable discussion of the importance of the proposed road, the following resolutions were adopted:

"*Reso'ved*, That it is of the highest importance to the future business prosperity of Indianapolis that the Indianapolis & Vincennes Railroad be constructed at the earliest possible period of time, and that her citizens stand prepared to do their part.

"*Resolved*, That an executive Committee, to be composed of the following named gentlemen, to wit: T. B. Elliot, Chairman; J. H McKernan, John S Spann, Calvin Fletcher jr., J. W. Davis, John Coburn, Jacob T. Wright. Aquilla Jones, John Caven, John C. New, Joseph A. McDonald, John M. Lord and John Carlisle, be appointed to canvass the city and vicinity, and solicit contributions to aid in the construction of said proposed road, with power to appoint sub-committees and solicitors where, in their opinion, it can be done profitably."

### Legislature of New York.

CARRYING WAY FREIGHT ON RAILROADS.

Mr. Andrus introduced a bill providing that no way freight offered for transportation and delivery at any station on any railroad in this State, shall be delayed awaiting shipment for a period longer than 10 days after its delivery, except in cases of flood or unavoidable accident.

The prices charged for the transportation of any way freight on any road shall not exceed, on freight carried not to exceed 50 miles, 50 per cent; on freight carried more than 50 and not more than 150 miles, 30 per cent; more than 150 miles, 10 per cent more than pro rata rates charged at the same time for through freights of the same description.

In case of failure, to comply with the above proposed law, the company shall forfeit to the owner of the freight thus delayed 1 per cent. per day on the value thereuf, for each and every day of delay.

By Mr. Bennett—For the consolidation of the Buffalo and Washington and Sinemahoning Railroad Companies.

A hill was also introduced providing for an elevated railroad in Broadway, N. Y. City.

### The St. Louis & Santa Fe Railroad.

I. S. Kalloch, Esq., of Ottawa, Kansas, is here endeavoring to secure Government assistance for the St. Louis & Santa Fe R. R., of which he is President. He considers his prospects for success flattering.

MARYLAND & DELAWARE RAILROAD.—The first train passed over this road on the 9th ult. It consisted of a house car and twelve flat cars, loaded with iron, chairs and spikes. The road is expected to be completed to Greensborough, Caroline County, Md, by the 1st of March, and to Easton by May next. Tench Tilghman, Esq., has been re-elected President of the company, and Dr. G. W. Goldsborough, Treasurer, with the old board of directors. T. F. Tilghman, Esq, is Chief Engineer.

### The National Railway.

The following select committe has heen appointed on the Military Railroad from Washington to New York: Mr. Stevens of Pennsylvania; Mr. Garfield of Ohio; Mr. Francis Thomas of Maryland; Mr. Brandegee of Connecticut; Mr. Starr, of New Jersey; Mr. Grinnell of Iowa, and Mr. Ratfort of New York.

The hill introduced hy Mr. Stevens sets forth the necessitics of the Government to require the construction of a national military and postal railroad, hetween the cities of Washington and New York. The company is authorized in the name and behalf of the United States to survey, locate, lay out, construct, equip, maintain, operate, use, collect tolls upon, and enjoy a continuous line of railway, with one or more tracks, hetween the cities of Washington and New York. The engineer is to be appointed by the corporation, hut to he approved by the Secretary of the Interior. The route is to he through the States of Maryland, Pennsylvania and New Jersey, and first class passengers are to he carried at three cts per mile. The road is to cross the Susquehanna River above tide-water.

Mr Garfield (Ohio), also introduced a hill for the establishment of a railroad between Washington and New York, and to constitute the same a military highway and postal route. They were hoth referred to the selcct Committee on that subject.

The N. Y. Trihune says:

We heartily trust that the new Air line Railroad from this city to Washington is not started to he sold out to the Monopoly, as they say the Circular Road has been. But, whether it he or be not, we are for the measure. There should he one great Military and Postal Railroad on this route–ultimately streching from the St John s to the Rio Grande though it must be constructed in sections as opportunity and means shall prescribe. It should avoid all the great cities –even this one–passing them inland, but throwing of branches tu each. The great mail should never stop to be drawn by horses–not even for a mile As a beginning toward what must and should he, we extent a welcome to the projected Air Line.

Penny trains are now fully established in London, England. They run entirely under ground, late and early. They will take a person to his neighhorhood for two cents, in ten minues, while if he took a bus above ground, an hour would he consumed in reaching his destination, and he would have to pay twelve cents.

The Augusta and Savannah Railroad is now so near completed that passengers can go between the two places in one day. The trains leave Augusta at 6 A. M, and arrive in Savannah at 10 P M. Passengers have to ride only twenty-two miles in coaches. This part of the road will also soon he completed.

### PERSONAL.

Edward H Williams, formerly Assistant General Superintendent of the Pennsylvania Railroad, has heen appointed General Superintendent, in place of Enoch Lewis, Esq., resigned. Mr. L had long held the position.

George A. Ingersol, Esq., has heen appointed Secretary and Treasurer of the Cleveland & Pittsburgh Railroad, in place of Edward Rockwell, resigned.

### RAILROAD ITEMS.

Winona & St. Peter Railway.—The Winona & St. Peter Railroad is now definitely located to the west line of Dodge County, and a map of the same has heen filed in the office of the Register of Dceds. From the station here it curves a little to the south, hut follows the southern tier of sections until it enters Claremount Township. It runs across the township in a direction considerably north of the east, entering near the north line of section 86, and reaching the western line in the north part of section 30. It passes some three and a half miles south of the village of Wasioja, and a little more than a mile south of Ashland.—*Mantorville Express.*

Nashville, Jan. 14.

Recent advices from helow state that trains will not run through from Chattanooga and Atlanta on the W. & A. Railroad before February 1st, as it will take till that time to complete the bridge over the Oostenaula. That over the Chattahoochie will he finished hy the 20th instant.

Mixed trains only have heretofore heen run on the Nashville & Decatur Railroad. To-day the freight and passenger trains will be separated, and a number of new cars placed on the road, the business of which is increasing. The railroad meeting at the capital yesterday, in favor of the Nashville & Knoxville Railroad, resulted only in the appointment of a committee to report an address and resolutions to another meeting next Thursday night.

A corps of engineers are now engaged in surveying a new route for a railroad from Freeport to Butler under the auspices of the Pennsylvania Railroad Company. It is said the road will be completed and in running order within two years.

New Engine.—A powerful locomotive, of most elegant and masterly workmanship, named "Sir S. Morton Peto," was turned out from the Atlantic & Great Western Railroad Company's shop, in Jersey City, last week.

The Central Transportation Company have now running upon different Northern roads 88 sleeping cars, costing $8,000 each. The Company has recently purchased all the patents existing upon improvements in sleeping cars, and applied them to their own vehicles.

Willis Gaylord Clark, editor of the *Knickerbocker Magazine*, claims tu have heen the first journalist who predicted the building of an Atlantic & Pacific Railroad.

The Utica, Susquehanna & Chenango Valley Railway Company is the name of a newly formed Railroad Company, organized at Utica, for the purpose of constructing a railway from Utica to Colliersville, the present terminus of the Rondout & Oswego Railroad project.

The *Picayune* notices very approvingly the tests of Dr. Everett, of this city, of an automatic telegraph he has invented. No electricity is used, no insulators, no hatteries or chemicals, no poles or apparatus. It is very simple, working easy and certain. The alphahet is easily learned, and is based on scientific principles.

Hon. W. B. Ogden, President of the Northwestern Railroad, who had invested large snms in the Nevada silver mines, a day or two since received his first dividend in the shape of a ton of silver in hars, valued at from forty five to fifty thousand dollars, greenhacks.

It seems queer that any part of the Northern States (except the western territories) should be a week's journey away from the railroad, hut the *Pioneer*, of Presque Isle, Maine, says that it takes six or seven days of good traveling hy a team to get goods up from Bangor.

The Southern Minnesota Railroad Company is constructing a telegraph line from La Crosse to Hokah, Minn., the poles heing set iu the ice.

Two hrothers, named Daniel and Wm. Kimball, employed on the Pittshurg & Ft. Wayne Railroad, one as station engineer and the other as hrakeman, were arrested at Valparaiso, Ind., yesterday, for robhing the trains of a large amount of property. They had been in the habit of pilfering daily from the cars, and a large amount of plunder was found on their premises.

Among the taxes levied upon corporation stocks in this State for the past year are $18,685 61 upon the Cleveland, Painesville & Ashtabula Railroad Company; $59,819 30 upon the Delaware, Lackawanna & Western; $35,875 76 upon the Lehigh Valley; $287,424 52 upon the Pennsylvania Central, and $8,680 16 upon the Erie Company.

A meeting was held at Chattanooga last Wednesday night, in favor of the early completion of the projected railroad to Cincinnati. In the course of the proceedings it was stated that the farmers and non-resident landholders in Dry Valley were all willing to subscribe one third, or even one-half their land, toward building the road.

In the Supreme Court Circuit at Newark, N J., a verdict of $3,000 damages was given against the New Jersey Railroad Company on the 13th, in favor of James T. Westboy, who was run over and hlinded hy one of the defendants' trains.

Southern Pacific Railroad.—A correspondent of the Chicago *Times*, writing from Nashville, Tennessee, says:

Considerable interest is heing manifested hy the citizens of Nashville, in the building of a railroad from this place direct to Knoxville. This would shorten the distance of travel hetwcen the two places ahout seventy miles. The contemplated road would pass through the oil region of Tennessee, and through some of the finest mineral lands of the State. In addition, it would afford the nearest and most feasible route at all seasons of the year from Washington to the Pacific. Let Chicago look out for her laurels, or Nashville will yet be first on the great Pacific railroad.

An ingenious little machine has heen put on some of the Parisian hacks. It indicates to the passenger who engages it, at once the time he is riding; the distance he has made, and the price he has to pay according to the official regulations. The little machine is called "comptoir mechanique," and the police iutend to put them on all the hacks of the city.

## MONETARY AND COMMERCIAL.

There is no essential change in the money market. Rates of interest rule from 10 to 15 per cent., though regular customers are accommodated at from 8 to 12. The supply of money is hardly enough to meet the demand.

The uncertainty of the financial decisions of Congress has checked speculation in a great degree. Gold is gradually working upward, from the regular demand; there is no disposition to speculate for a rise, because the Secretary of the Treasury, can at pleasure bring down prices by sub-treasury sales.

The following are the closing quotations for exchange and coin:

| | Buying. | Selling. |
|---|---|---|
| N. Y. Exchange | par. | 50@1-10 prem. |
| Philadelphia | par. | 50@1-10 prem. |
| Boston | par. | 50@1-10 prem. |
| Gold | 140 | 140¼@140¾ |
| Silver | 129@133 | 132 @133 |

Government securities were again stronger in New York to-day, and there was an improved demand here at full prices. The 7-30s are working gradually upward, and the new 5-20s are gaining slowly upon the old; 10-40s were the only bonds that were weak. We quote:

| | Buying. | Selling. |
|---|---|---|
| 5-20's, old | 103½ | 104 |
| 5-20's, new | 101½ | 102 |
| 10-40's | 93 | 93¼ |
| 7-30's, August | 99⅛ | 99¼ |
| 7-30's, June | 98⅝ | 99¼ |
| 7-30's, July | 98⅝ | 98⅞ |
| Certificates | 98⅛ | .... |

The New York railway stock market opened strong to day, but closed weak. The business seems to lack outside support. The public regard railway stock as too high for safe investment, and surplus money in their hands is being put into Government securities. Quotations compare as follows:

| | Tues. A. M. | Wed P. M. |
|---|---|---|
| U. S. 6 per cent Bonds | 104½ | 104 |
| " 5-20 " old | 104 | 103⅞ |
| " 5-20 " 1864 | 101⅞ | 102 |
| " 5-20 " 1865 | 101⅞ | 102 |
| " 10-40 " | 93½ | 93½ |
| " One-year Certificates | 98⅞ | 98⅞ |
| 7-30s, 1st series | 99½ | 99½ |
| 7-30s, 2d series | 98½ | 98⅝ |
| 7-30s, 3d series | 98¾ | 98⅞ |
| New York Central | 93⅜ | 93⅜ |
| Erie | 92½ | 93 |
| Hudson River | 105½ | 105 |
| Reading | 102 | 102½ |
| Michigan Central | 105½ | 105 |
| Michigan Southern | 69 | 69½ |
| Illinois Central | 126½ | .... |
| Cleveland & Pittsburg | 77½ | 78¾ |
| Chicago & Northwestern | 32½ | 32 |
| " " pref | 57¾ | 57½ |
| Cleveland & Toledo | .... | 106 |
| Rock Island | 104½ | 104½ |
| Pitts., Ft. Wayne & Chicago | 95 | 94⅞ |
| Ohio & Mississippi Certificates | 26½ | 26½ |

## Railroad Earnings.

First Week in January—

| | 1866. | 1865. | Decrease. |
|---|---|---|---|
| Grand Trunk (Canada) | $100,087 | $109,143 | $9,056 |
| Michigan Southern | 75,310 | 84,894 | 9,554 |
| Marietta & Cincinnati | 22,130 | 20 543 | *1,587 |
| Racine & Mississippi | 10,016 | 10,594 | 577 |
| Gt. Western (Canada) | 51,991 | 60,388 | 8,4?6 |
| Michigan Central | 59.590 | 61.509 | 1,919 |
| Chicag & Alton | 50 471 | 61,830 | 11,359 |
| Chicago & Rock Island | 62,232 | 79,074 | 16,842 |

*Increase.

The stock market has been firmer and better, with a fair degree of activity extending through the list of Railways. This improvement arises mainly from the purchases of the short interest, which interest has been very much reduced within a few days. We hear of but little increase of outside business, and the general impression is that the movements are not of a character to give the market more than temporary strength. So long as Government offers superior attractions for the investment of money, the effect must be prejudicial to other stocks, and there is certainly but little in the prospects of railways during the current year to create an outside demand for them. The market is therefore likely to be under the immediate control of the speculators of the street for some time, occasionally favoring the bulls and occasionally the bears, but without possessing the elements of strength. The bears appear to have covered their contracts to such an extent as to give them a favorable position for fresh attacks, and what with the discussion of financial measures looking to contraction, and the diminishing business of our railways, we see nothing very hopeful in the immediate future of the stock market.—*N. Y. Tribune*

To illustrate the truth of our argument in reference to the probable decrease in railway earnings, we give the December results of various railway lines below:

| | 1864. | 1865. | Decrease. |
|---|---|---|---|
| Chic & Northwestern | $563,400 | $546,609 | $16,791 |
| Chic. & Rock Island | 308,187 | 190,272 | 117,915 |
| Michigan Southern | 398,091 | 366 192 | 31,899 |
| Chicago & Alton | 241,582 | 224,022 | 17,560 |
| Michigan Central | 376,460 | 328,869 | 47,601 |
| Fort Wayne | 667.034 | 571,000 | 96,034 |
| Illinois Central | 603,402 | 497,402 | 106,000 |

The results in a month, which from late open navigation should have given increased earnings, show that a radical change in railway business is commencing. It would in fact be extraordinary if changes such as have been produced by the war should not operate to reduce business somewhat in the ratio as they increased it. Water transportation by the Mississippi, and the loss of Government business, must, combined, reduce railway traffic. It scarcely admits of a doubt, therefore, that the railway returns of 1866 will make a very poor comparison with 1865.

The Central Railroad of New Jersey has declared a quarterly dividend of 2½ per cent. The final instalment of 30 per cent. on the new stock is payable on the 15th inst.

The Michigan Southern receipts for the first week in January show a decrease of $9,700.

The Lehigh and Wyoming interests have obtained the franchises and property of the North Branch Canal Company of Pennsylvania, extending from Wilkesbarre to Chemung, on the New York State line, and will proceed to construct a railroad between the two points. This new road is designed principally for passengers and anthracite coal, and will come in active competition with the Delware, Lackawanna & Western Railroad, which has a monopoly of the business.

The receipts of the Racine & Mississippi and Northern Illinois Railroads, for the week ending December 21, were:

1865... ..... $7,179 53 | 1864..... ..... $10,029 64

Receipts from Jan. 1 to Dec. 1, 1865:

1865.. $676,497 91 | 1864..$568,257 81 | Inc... $108,240 10

Receipts for the week ending Dec. 31:

1865..... $12,885 54 | 1864..... $18,819 96

Receipts from Jan. 1 to Dec. 31:

1865...$689,383 45 | 1864... $587,077 77 | .... $102 305 68

The Pittsburg, Fort Wayne & Chicago Road earned in December, including military traffic:

1864.....$914,032 | 1865.....$571,000 | Dec..... $343,032

The month, omitting military traffic, stands:

1864..... $667,034 | 1865 .... $571,000 | Dec..... $96,034

The fiscal year yields in—

1865 ..$8,392,000 | 1864 ...$7,120,465 | Inc....$1,271,545

One of the most prosperous railways in the country is the "Western," running from Albany to Worcester and Boston. Its net profit for 1865 is over $1,200,000. It pays interest on State loan, contributes $50,000 to a sinking fund, divides ten per cent. on the capital, and has $147,000 left. Its accumulated surplus is over a million of dollars.

## Reading Railway.

The following tabular statement in detail for each branch of traffic upon the Reading Railroad, shows the comparative results of the year:

1864.

| | |
|---|---|
| Travel—342,252 passengers | $909,882 |
| Merchandise—807,105 tons | 953,776 |
| Coal—3,065,577 tons | 7,203,775 |
| Mail | 24,497 |
| Miscellaneous | 178,411 |
| Gross receipts | $9,269,341 |
| Gross expenses | 4,961,191 |
| Net Profits | $4,308,150 |

1865.

| | | Inc. | Per cent. |
|---|---|---|---|
| Travel—393,359 pas'ng's | $1,065,847 | 156 965 | 17 1-10 |
| Merchandise—846 105 tons | 1,165 277 | 911,501 | 22 2 10 |
| Coal—3,090,814 tons | 8,627,292 | 1,423,517 | 19 7 10 |
| Mail | 28 871 | 5,374 | 22 8-10 |
| Miscellaneous | 255 232 | 76,821 | 43 |
| Gross receipts | $11,142,519 | $1,673,178 | 20 2-10 |
| Gross expenses | 6,330,248 | 1,769 051 | 27 6-10 |
| Net profits | $4,812,271 | 504,121 | 11 7-10 |

Gross expenses, including renewal fund, in the

| | | | |
|---|---|---|---|
| Year 1864 were | 52 52-100 | per cent. | of gross receipts. |
| Year 1865 were | 56 81-100 | " | " |
| Apparent increase | 3 29 100 | " | " |
| Increase in taxes | 2 10-100 | " | " |
| Real increase | 1 19-100 | " | " |

The receipts and expenditures for each, per passenger per ton, has been as follows:

1864.

| | | | |
|---|---|---|---|
| Per passenger. cost | $1 13 7-10 | —received, | $2 65 8-10 |
| Merc'dise per ton, cost | 63c | " | 1 18 2,10 |
| Coal per ton, cost | 81c | " | 2 35 |

1865.

| | | | |
|---|---|---|---|
| Per passenger. cost | $1 42 5 10 | —received, | $2 70 9-10 |
| Merc'dise per ton, cost | 79 4-10 | " | 1 37 7-10 |
| Coal per ton, cost | 1 06 0-10 | " | 2 79 1-10 |

The Pottsville *Miners' Journal* speaking of this report, says:

There will hardly be any reduction in tolls before the opening of business in the spring. Now the disproportion between the cost of coal at the mines and the freight is too great. For instance, coal is now selling in this region at from $3 50 to $4 per ton, while the cost of transportation to Port Richmond and Philadelphia is from $3 50 to $3 68 per ton, a distance of only 93 miles. This disproportion cannot be maintained at the reduced price of coal, without injury to the trade, while it is burdensome to consumers abroad.

Best Route to St. Louis and Chicago

MONDAY, OCT. 31.

## Indianapolis and Cincinnati

RAILROAD.

THREE THROUGH TRAINS DAILY.

| | LEAVE. | ARRIVE. |
|---|---|---|
| St. Louis and Chicago Express... | 7:15 A. M. | 9:00 A. M |
| Springfield and St. Joe Express.. | 1:00 P. M. | 9:07 P. M. |
| St. Louis and Chicago Express... | 10 0 P. M. | 5:00 A. M. |

Sleeping Cars by this train to St. Louis and Chicago.

ACCOMMODATION TRAINS.

| | | |
|---|---|---|
| Lawrenceburg and Harrison..... | 5:15 P. M. | 8:20 A. M, |
| Harrison..... | 9:30 A. M. | 2:40 P. M. |

Through Tickets can be obtained at the Burnet House. Spencer House, and Gibson House Offices; also at the Depot.

Passenger Depot within a few squares of all the principal hotels in the city. ROBT. MEEK, Superintendent.
T. B. LORD, Gen'l Ticket Agt

---

## WRIGHTSON & CO.

# Printers,

167 Walnut St., Cincinnati, O.

---

## The Old And Reliable Route.

Through to Pittsburg without Change.

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

---

Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:20 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

---

# 1865.

☞ CHANGE OF TIME! ☜

By the Broad Road Gauge Route, the

## Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI..... | 9:00 A. M. | 10:40 P. M. |
| HAMILTON ..... | 9:57 " | 11:33 " |
| DAYTON..... | 11:30 " | 12:55 A. M. |
| SPRINGFIELD..... | 12:35 " | 1:45 " |
| URBANA..... | 1:40 P. M. | 2:15 " |
| GALLION..... | 5:25 " | 6:10 " |
| MANSFIELD..... | 6:50 " | 7:15 " |
| AKRON..... | 9:30 " | 10:00 " |
| RAVENNA..... | 10:05 " | 0:40 " |
| LEAVITTSBURG..... | 11:00 " | 11:40 " |
| GREENVILLE..... | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE..... | 1:20 " | 2:30 " |
| CORRY..... | 2:45 " | 3:55 " |
| Arrives SALAMANCA..... | 4:58 " | 2:55 " |
| NEW YORK..... | 10:30 P. M. | 1:00 " |
| BOSTON..... | 2:30 " | 8:00 A. M. |
| PITTSBURGH..... | 2:20 A. M. | 3:20 P. M |
| HARRISBURG..... | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA..... | 5:35 " | 6:55 " |
| BALTIMORE..... | 5:45 " | 7:00 " |
| WASHINGTON CITY... | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast cornor of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, } Passen
CHAS. COOK, } Agents.

---

# CENTRAL RAILROAD

—OF—

## NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

---

## NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twedty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a.m. (Ex.); 3:00 (Ex. 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

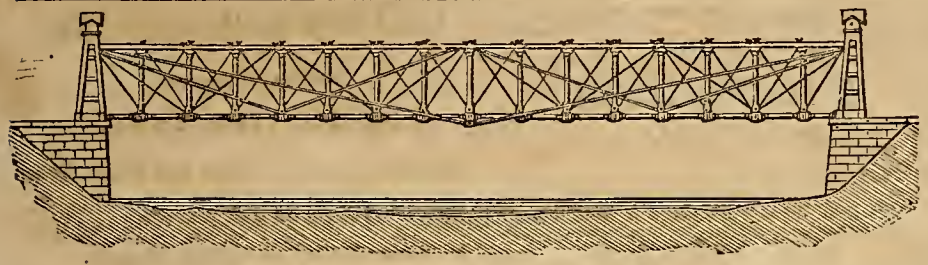
Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

---

NEW-YORK AND HARLEM RAILROAD Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



(*Plan of Bridge.*)

## FINK'S PATENT
## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

**HOLENSHADE, MORRIS & CO.**

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

**SCREW BOLTS,**

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

**M. W. BALDWIN & CO.**

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

**KNOX & SHAIN,**

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

**FINDINGS,**

AND

**MACHINERY,**

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

**BUSH & LOBDELL,**

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

## Chilled Wheels and Tyres

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

**AMERICAN BANK NOTE COMPANY.**

***Bank Note Engravers & Printers.***

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

**SUPPLIES,**

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

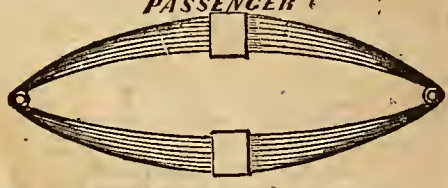
## RAILWAY SPRINGS.

**FREIGHT**





**PASSENGER**



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS,**

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y.

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,
54 Exchange Place, New York.

---

## W. M. F. HEWSON,

**STOCK BROKER,**

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collections.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new unning stock, with all recent improvements; and a

*Bridges & Trock are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT.

Will he more than sustained under the reorganization of its business.

In additinn to the *Unequalled Attractione of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerons points on the road, between the Ohio river aud Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more oi the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHING. TON CITY.

W. P. SMITIL *Master Transportation, Baltimore*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sle ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, hut not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots, East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

O mn hnses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo Depart. | Arrive. |
|---|---|
| Mail | 7:20 A. M 8:00 A. M. |
| St Lonis, Cairo, & Louisville | 7,50 P. M. 11:00 P. M. |
| L uisville, Special Train | 3:45 P. M. 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street C. E FOLLETT, General Ticket Agent.

W. D GRISWOLD General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis. at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicagn Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains: Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

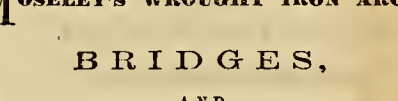
## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

CAR SPRING MANUFACTURER,

**Wi ngton, Delaware.**

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continne to receive orders and to furnish with promptnes the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

—ESTABLISHED 1821.

## MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

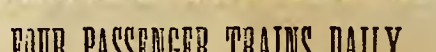
**Cast Iron Gas or Water Pipe**—1¼ to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!



## FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.54 P. M. (Express

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, - - - } Editors

CINCINNATI:
THURSDAY, JANUARY 25, 1866.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

W. A. MUNSELL,
*General Agent.*


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | *Depart.* | *Arrive.* |
|---|---|---|
| Cincinnati Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:00 P. M. | 4:00 A. M. |
| Morrow Accommodation | 5:30 P M. | 8:00 A. M. |
| Night Express | 7:00 P. M. | 3:50 P M |
| Night Express | 10:00 P. M. | 9:40 A. M. |

MARIETTA AND CINCINNATI,

| | | |
|---|---|---|
| Mail | 5:00 A. M. | 7:30 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P. M | 5:45 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Indianapolis & Cambridge City | 7:00 A. M. | 9:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:50 P. M. |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P M. |
| Richmond and Chicago | 7:00 A. M. | 9:50 P M |
| Dayton Accommodation | 6:45 P. M. | 9:35 P. M. |
| Dayton, Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A. M. |
| Richmond & Chicago | 5:30 P. M. | 1:10 P. M. |

CHICAGO & GREAT EASTERN.

| | | |
|---|---|---|
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " | 5:30 P. M. | 1:20 P. M. |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Mail & Springfield Express | 2:00 P. M. | 4:30 P. M. |
| St. Louis and Chicago Express | 7:30 P. M. | 1:10 A. M |
| Lawrenceburg and Harrison Accommodation | 4:30 P. M. | 8:30 A. M. |
| Harrison Accommodation | 10:15 A. M. | 2:20 P. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R.

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M. | 4:35 P. M. |
| Caboose Accommodation | 4:00 P. M. | 6:00 A. M. |

KENTUCKY CENTRAL.

| | | |
|---|---|---|
| Express | 6:00 A. M. | 6:30 P. M |
| Accommodation | 1:50 P. M. | 11:00 A. M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Morning Express | 9:10 A. M. | 6:30 P. M. |
| Night Express | 0:50 P. M | 30 A M. |

### Kentucky---Her Resources, and How to Develope them.

The rich and beautiful State of Kentucky has been less developed by internal improvements than any of the older States. The zigzag route of railroad that runs from Cincinnati to Lexington, Lexington to Louisville, and thence to the Tennessee line on the way to Nashville, being the only railroads in the State. It is true that her fair territory is traversed by several rivers, some of which have been rendered navigable by locks and dams, and thus afford a means of transit for her commerce; and it is also true, that there is no State in the Union traversed by more and better turnpike roads than is Kentucky, in most of which the State is either part or exclusive owner. So far as it goes, this is all well enough, although we think it would be better for the State to sell out its entire interest in turnpikes and turn them over to private management, as well as for the communities through which they pass. These turnpike roads, however, do not meet the wants of the age in which we live, and now is the time for Kentucky to not only aid herself, but also to secure the assistance of others in the development of her unrivalled agricultural and mineral wealth. It is scarcely necessary for us to say that railroads are the true means of doing it. The experience of the past few years fully demonstrate that even the local trade that flows through the avenues that they now have, is sufficient to render them sources of profit. What would they become if the commerce of a dozen States had to pass in transit over her iron ways? No *one* road would be sufficient for the emergency. Besides, with a mineral wealth unsurpassed even by Pennsylvania, what would be the local tonnage of coal, iron, petroleum, lead, zinc, baryta and other minerals known to exist in such rich profusion, and that are now hidden and of but little value because of their inaccessibility to market. The improvements most pressingly needed by the State, and what would be a cheap investment were the State to assume their entire cost, and then donate them to some of her citizens, are:

*First*—The railroad from Nicholasville to Danville, through Lincoln, Pulaski and Wayne counties, to meet the road now partly built from Knoxville.

*Second*—A branch from the above, starting at Danville and passing through Casey, Adair and Cumberland counties, on its way to meet the Tennessee roads pointing in this direction from McMinnville.

*Third*—Starting at Paris and going through Clark, Madison, Rock Castle, Laurel and Whitley counties, on the route surveyed more than twenty years ago for the Cincinnati & Charleston Railroad; or, this route might be made from Paris to Winchester, in Clark county, through Estill, the corner of Owsley, Clay, Knox and Harlan, to the Cumberland Gap, and then form connection with the Virginia and East Tennessee Railroad, and through the valley of the French Broad river with the roads of North Carolina, while the one first named, leading direct to Knoxville, would, through the valley of the Tennessee river, form a direct connection with the railroads of South Carolina.

*Fourth*—A road starting at Newport, and going through Campbell, Pendleton, Bracken, a corner of Nicholas, Fleming, Morgan, Floyd and Pike, and passing out through the Pound Gap to meet the Virginia roads leading by the way of Covington, etc., to Norfolk.

*Fifth*—The Cincinnati & Louisville Road, passing through Kenton, Boone, Gallatin, Carroll, on the borders of Trimble and Henry, through Oldham and Jefferson, to the city of Louisville, with a branch taking the bend of Eagle river, and passing through Grant, Owen, Scott and Fayette counties, to Lexington.

*Sixth*—The completion of the Lebanon branch of the Louisville and Nashville Railroad to a junction with the road first named in this article, and of the Glasgow branch to Burksville.

The above improvements would add at least one hundred or one hundred and fifty millions to the taxable value of the landed property of the State, would develope a mineral wealth that would annually add to the income of her citizens not less than fifty millions of treasure, and render Kentucky what her resources and position entitle her to be—one of the wealthiest States of the Union.

### Southern Pacific R. R.

The certificate of incorporation of this company was filed on the 2d ult. in the office of the Secretary of State, at Sacramento. Capital, $30,000,000. T. G. Phelps, President; B. W. Hathaway, Treasurer; John F. Sears, Secretary. We published, on the 21st ult, the preliminary proceedings and the Board of Directors. Gen. Rosecrans, Gen. P. Banning, Capt. P. Johnson, President of the Colorado Steam Navigation Company, and Wm. P. Coleman, are among the corporators. The route will be from San Francisco south to San Diego, then east on or near the California State line, connecting with the proposed Southwest Branch from. St. Louis. 720 miles of this road will be within the State of California.

San Francisco is severely in earnest in these enterprises. Any project that tends to unite California with the Eastern States, meets prompt attention and encouragement. We find a State of some 200,000 inhabitants, energetically pushing two roads north and one south to meet the great trunk lines at the hundredth parallel. Californians have never faltered nor hesitated in this work, even in the darkest days of the republic. Aside from

the commercial advantages they are to derive the protecti .n afforded to their weakly-guarded coast line, by the celerity with which troops may he eonveyed to the Pacific, is of great moment. The tedious and expensive three months' march of reinforcements is converted into an easy journey of at most eight days from the Mississippi.

If the old maxim, "in time of peace prepare for war," is of any force, it applies very peculiarly to onr present position. The roads now constructed or in process, in California, cover the more vulnerable points of the Pacific coast, where the cruisers of foreign foes would look for rich cities to pillage, and strong points for fortifying against recapture. The Southwestern Branch runs conveniently near the Mexican border in case of trouble in that direction, while the Central Pacific guards us against mutiny from the rebellious Mormons.

The government has done well for the Eastern portion of these enterprises, but the public hardly appreciates their vast importance. Let the Eastern people take a lesson from the unaided exertions of the people of the West, and push on the iron belts that will bind our great Republic beyond the power of separation.

### Marietta Railroad.

The refusal on the part of the Spring Grove Avenue Company to permit the Marietta Railroad to cross their avenue, has been settled by the Probate Court, which dismissed the injunction. The value of the right of way was claimed to be $25,000, but a jury assessed it at $2500.

Since writing the above, the company has collided with the city authorities. by excavating across Smith street, three feet below the established grade; another injunction resulting therefrom, and the city concession of August being withdrawn.

Perhaps the company were exceeding their rights in this instance; but it may be laid dowu as an axiom, that the authorities of Cincinnati have always been very jealous and exacting not only towards these railroads which center here, but those that are trying to. It is about time that the city policy in this respect was changed.

As the Marietta road has triumphed over the many obstacles which have hitherto impeded tt, we trust that the present difficulty may be compromised, and that we shall soon see this new route in successful operation.

**The Government realized $91,956,138 from the imports of dry goods at the port of New York for the year ending December 31, 1865, being an increase of receipts of $17,366,376, as compared with the exhibit of 1864.**

The Secretary of the Treasury has decided that canal and ferry boats are not liable to an internal revenue tax on gross receipts.

### Albany Iron and Machine Works.

Jones, Haskell & Co. have succeeded to the well known firms of Pruyn & Lansing, and Daniels & Orchard, at Albany, N. Y. The senior partner, Mr. E. H. Jones, was for twenty-six years in the employ of the New York Central Railroad, the last twelve years as master mechanic. The Railroad shops at East Albany, erected under his supervision, are fine specimens of his mechanical talent. We wish the new enterprise all possible success.

### The Trade of Southern Illinois.

The trade of Southern Illinois, or, as it has not inappropriately been called, "Egypt," has for many years, been of considerable importance to our city. Every year developes more and more its extreme fertility and adaptability for the growth of all kinds of produce. Wheat, corn, castor beans, cotton, fruits of all kinds, and all the cereals grow luxuriantly there. Years ago, cotton was cultivated in small patches by almost every farmer for his own use, and the produce justified the prediction that it would one day become a cotton-growing country. During the past year, large crops of it, and of fine staple, have been grown in the counties of Perry, Franklin, Williamson and Union, and from these points it is said that about two thousand bales have been shipped this season. This success has induced many others to turn their attention to it, and the probability is, that if the season be favorable, the crop will be largly increased — The fruit crop of the last year has alsn been immense. Vast quantities of peaches, apples and pears have been shipped from Centralia, Tamaroa, Duquoin and other points on the Illinois Central Railroad. During a visit, last fall, to Tamaroa, in Perry county, thirty-six miles south of Odin, we visited a pear-orchard, (dwarfs), consisting of twenty-five hundred trees, many of them in full bearing. It is said the owner shipped five hundred bushels of pears to the different markets.

But not only does this region produce well as an agricultural country, hut it must inevitably become of great importance as a manufacturing point. There are large forests of fine timber, oak, poplar, walnut, cypress, etc., and inexhaustible mines of coal, and it is thought iron also is imbedded in the earth.— Du Quoin, in Perry county, has grown to be a city of five thousand inhabitants in a few years, solely from the coal interest, and during the last summer at Tamaroa, a vein of the finest coal in the State was struck, and is being worked. There are also two or three shafts in progress, and we may look for this town, situated on a high rolling prairie on one of the most beautiful sites in Illinois, to become a place of considerable importance

As Southern Illinois grows, our business men, and men of capital, should keep an eye to it, and foster i s growth hy liberal use of their capital. They will find, in the language of John Unit, that *"it will pay!"*— Cincinnati is as near "Egypt" as Chicago, and has greater facilities, and more natural inducements for her trade than any city near the lakes. Her cotton might be manufactured near her own fields, if assisted hy our capital, or our energy could bring it to our own market, as the nearest and best cotton market in the West. Her wheat, castor beans, hogs and cattle would more naturally seek this market than any other, as her merchants and traders know that they can purchase as fairly, and to as good advantage, if not better here, than in any other city. And then "Egypt," in the next ten years, will want an immense amount of machinery, steam engines, mills, agricultural implements and tools of all kinds, and it becomes us to look to it, that our old customer is not forgotten in seeking for new ones.—*Cin. Journal of Commerce.*

### Pacific Railroad.

Mr. Rowles devotes an important portion of his volume to the question of the Pacific Railroad. His experience among the mountains deeply impressed his mind with the need of its speedy completion. His confidence in the practicability of the measure increased with every mile of his journey. Materials for its construction are not wanting in faborable localities. There is plenty of good timber in the mountains. The soft cotton-wood of the plains can be hardened by a chemical process for sleepers and ties. Water can be procured by artesian wells it the thirsty stretches of the desert. The first third of the line, from the Missouri to the Rocky Mountains, presents comparatively few difficulties. Three hundred men will grade it as fast as the iron can be laid. It is a level, uatural roadway, with but little bridging, and no want of water.— From the base of the Rocky Mountains to Great Salt Lake, there are no more formidable obstacles than on the railroad from Springfield to Albany. As the line reaches the California border, the Sierra Nevadas present the most difficult part of the work. But the difficulties are already in a fair way of being overcome hy the energy of the population, and the ability and resources of the California Pacific Railroad organization.—*New York Tribune.*

COVINGTON AND CINCINNATI BRIDGE—FACTS CONCERNING IT—GRATIFYING PROGRESS OF THE GREAT WORK—THE DATE OF ITS COMPLETION FIXED FOR NOV. 1ST, 1866.—The winter, so far, has been favorable for the prosecution of the work on the Covington and Cincinnati bridge, and great progress has been made.— The number of wires taken across daily is about eighty, being forty to each stran.— The fourth stran will he completed during the present month. The two great cables will be composed of seven strans each. The work on the superstructure, in the various shops of the company, is being pushed forward with great vigor, and the prospects now are that the bridge will he completed and thrown open for travel by the 1st of November next. This, however, will depend altogether on the weather. Cold does not now interfere with the work, as formerly, but wind instantly puts a stop to operations, as it is impossible to carry the wire across when a stiff breeze is prevailiog. Three fourths of the wire for the cables has been received from England, and most of it oiled and prepared. The remainder will arrive in good time. The wrought iron floor beams—between six and seven hundred in number—have also been received. They were manufactured in Buffalo, N. Y., and are 19 feet 6 inches in length, and when spliced will be 39 feet long—the width of the bridge. A planing mill has been erected hy the company on the wharf on this side of the river, where the joists for the flooring will be joined and brought to a uniform thickness. Nearly all the lumber for the flooring is on hand, and a drying house for seasoning it is in operation. The floor will he laid double and in pitch, like the deck of a vessel. It will be about five inches in thickness, insuring increased strength, steadiness and stiffness to the bridge.

### The New Through Route.

The following, from the Cincinnati *Gazette*, covers the more important points in the agreement between the Atlantic and Great Western and Philadelphia and Reading Railroads and connecting links:

The object and intent being that the several railroads shall be so worked, managed and directed by the respective corporations owning or controlling the same, as to form one great through route from the cities of Cleveland, Cincinnati and Dayton, and all other points to or with which the Atlantic and Great Western Railway Company may have access or connection, to the City of Philadelphia via the Philadelphia and Reading Railroad and its tributaries, and a line to New York via the Philadelphia and Reading Railroad, the East Pennsylvania Railroad, and the Morris and Essex Railroad.

The Atlantic and Great Western Railway agree to complete by 1st of November, 1869, the laying of a narrow gauge track from its proposed connection with the Western Central Railroad at Franklin, Pennsylvania, to Dayton, Ohio, and of a narrow-gauge track to Oil City, Pennsylvania, so as to allow the passage of narrow-gauge cars to Cincinnati, Cleveland and Oil City. The Western Central Railroad agree to complete by the 1st of November, 1869, a narrow-gauge track from Franklin, Pennsylvania, connecting them with the Atlantic and Great Western, to the point of connection with the Lewisburg, Centre and Spruce Creek Railroad in Centre County, Pennsylvania. The Lewisburg, Centre and Spruce Creek Railroad agree to complete by the 1st of November, 1869, a narrow-gauge track from the point of connection with the Western Central Railroad in Centre County, Pennsylvania, to a point upon and connecting with the Catawissa Railroad in Northumberland County, Pennsylvania.

Thence the route will be over the Catawissa Railroad to Tamaqua, and from there on the Philadelphia and Reading Railroad to Philadelphia.

The New York line will leave the Reading Railroad at Hamburg or Port Clinton, by a road to be built to Topton, on the line of the East Pennsylvania Railroad, thence over the East Pennsylvania Railroad to Allentown and to Easton by an extension of the East Pennsylvania Railroad. From Easton, it will proceed to New York by the Morris and Essex Railroad. The line from Franklin, Pennsylvania, to the connection with the Catawissa Railroad, is to be under the direction and control of the Atlantic and Great Western Railway. The Morris and Essex Railroad and the Catawissa Railroad are each leased for 999 years. The Philadelphia and Reading Railroad and the East Pennsylvania Railroad are leased for ninety nine years.

The twenty-seventh clause in the agreement is of particular interest, and we give it in full:

"WHEREAS, The object of this agreement is to furnish, as far as practicable, equal facilities for freight and passengers, to and from Philadelphia and New York, East and West, it is hereby agreed by and between the Atlantic and Great Western Railway Company and the Philadelphia and Reading Railroad Company, that whenever the citizens of Philadelphia and the citizens of Pennsylvania shall together provide and furnish one-half the sum of money necessary to build and equip a satisfactory line of steamers to run between the port of Philadelphia and England, then and in such event the said, the Atlantic and Great Western Railway Company and the Philadelphia and Reading Railroad Company will each furnish one half of the remaining sum therefor."

In case any dispute or difference should arise between any parties of the agreement, the same is to be referred to a Board of three disinterested persons, who shall decide in the case in dispute; and if the decision be made by the whole Board, or a majority thereof, the decision shall be final and conclusive between the parties.

### The Giffard Injector,

Messrs. Wm. Sellers & Co., of Philadelphia, sole manufacturers of this instrument in this country, have recently patented an improvement in it, which consists in making it regulate the influx of water, so that when started with a steam pressure of 5 lbs., it will continue to work while the pressure rises to 150 lbs. Before this improvement it was necessary to adjust the water influx to the steam influx, which varied with the pressure, or there would be either an overflow of water, which would waste heat, or an excess of steam, which would often stop the influx of water and always waste power. The means by which the instrument regulates the influx of water is, by moving the water-jet and receiving nozzles upward or downward, that is, towards or from the steam cone. When moved nearer to the steam cone, the water-way is contracted; when moved farther from it, the water-way is enlarged; thus more or less water is admitted. The power that moves the nozzles is the pressure of water in the overflow chamber, which is closed up to prevent external overflow. The overflow chamber is bored; and a piston is fitted in it, water-tight, but easy to move. In this pistou the nozzles are fixed, so that as the piston moves it carries the nozzles with it. The conical pipe from the receiving nozzle to the valve is truly turned outside, and slides water-tight in a truly bored pipe, as small as is consistent with proper size and thickness of the receiving pipe. As the piston is several inches in diameter, and the pipe one inch or less, there is an unbalanced area of piston of several inches. When there is an overflow, the pressure of it may be nearly equal to the boiler pressure, while that in the water entrance is about equal to atmospheric pressure; the piston, therefore, is moved towards the water entrance until the water-way is sufficiently contracted to reduce the pressure in the water chamber. On the other hand, when the water admission is insufficient for the steam, the water shut up in the overflow chamber is exhausted from it, and driven into the boiler by the excessive power of the steam; thereby leaving a partial vacuum in the overflow chamber; the atmospheric pressure in the water entrance then forces the piston downward in the overflow chamber, and thus widens the space between the steam and water cones through which the water enters, and the water supply is increased. Were there no friction of the piston and pipe in their cylinders, there would be a perfect balance in the overflow chamber, and the proportion of water to steam would be exact. As it is, when the instrument is in good order, the adjustment is sufficiently perfect to prevent stoppages from fluctuation of the steam pressure, which have previously rendered the injector troublesome.

Other improvements have been made of late; one consisting of a reservoir connected with the overflow, so that the water which had overflown at one moment might be thrown into the boiler at the next moment when the power increased. Hot water also has been fed into the overflow chamber, and driven into the boiler by the steam; but this practice, though very interesting, is not convenient in ordinary work.

Mr. James Millholland, some years ago, patented a simplification of the injector. He shut up the opening between the jet and receiving nozzles, so that there could be no overflow. But to start it was necessary to have an overflow; this he provided by a cock near the check-valve of the boiler. When the stream became so strong as to indicate sufficient force, the cock was shut; and the check-valve was forced open and the feed continued. We do not know the results of Mr. Millholland's modification. From a collection of experimental parts which we have in Messrs. Sellers' works, we judge that they must have tried it; and, if so, the result was not such as to induce them to depart from the old form.—*American Artisan.*

### English Treatment of Iron for Rails.

As long as the legislation of the United States practically protects the rail manufacturers of Great Britain rather than our home manufactures, we shall probably have to use foreign rails, and therefore it is important that we should know something of the treatment of the iron in their manufacture. The London *Mechanics' Magazine*, after referring to the chemical composition of different ores affecting the ultimate value of the product, refers to the mechanical treatment they receive in the English rolling mills: "The general practice in Wales is to use the ordinary squeezer, consisting of three grooved eccentric rollers, is used, and this is certainly a preferable machine to the other. The compression of iron is otherwise mechanically effected by the old tilt hammer and the steam hammer. At one time the tilt hammer was the only means of compression used, but since the furnaces have been driven, end forge and finery cinders and impure ores have been used, an inferior iron has been made, which will not stand the old tilt, and so the squeezer was introduced. By this instrument almost anything can be shingled into a bloom and passed through the rolls, whereas, with the old tilt, the iron, from first to to last, has to bear the full weight of the blow. With the steam hammer, however, the case is different, as the blow can be regulated to a nicety. Specifications for rails frequently contain the stipulation that the iron shall be hammered, and not squeezed, and the plan has been adopted of doubling the puddle balls by slightly hammering them, placing them one on the other, and welding them into a slab for the head of the rail. By this arrangment the rail head is made crystaline and not fibrous, as it is only submitted once to the drawing action of the rolls. After being squeezed or hammered, their on is passed through the rolls, and leaves them as No. 1 iron or puddle bar, which is cut by shears into the length necessary for the subsequent pile. There are different methods of making the various piles for rails, &c, the great object in piling being to get the pile as solid as possible, and free from interstices. Piles are frequently made of puddle bar of different widths, piled alternately so as to break joint. In some instances the puddle bar is cut into short lengths, equal to the width of the pile, and each layer piled at right angles to the previous

one. The object of this arrangement is to make the iron less fibrous, and it certainly has that tendency.

There are various sections of rail in use, but the three most general are the double-headed rail, the bridge rail, and the American or contractor s rail. The double-headed rail is generally made with slabs at the top and bottom of the rail; which for the best quality of rails are abont 2 in. in thickness, and the rails are double-heated. In some instances these rails are made of three hammered slabs piled on each other. In rolling the American, nr flange rail, as it is also called, a particular description of cold short iron is made for the flanges to stand the strain that necessarily arises from the rails being rolled edgeways, and the flanges not travelling at the same speed (from less periphery of the rails) the flange portion of the rail also should slip. Partially on this account, then, and partially on account of the flange becoming colder than the mass of the rail, it is difficult to obtain a perfect flange unless a peculiar description of iron is used. This iron is made generally with forge cinders and Welsh ironstone without any red ore. The bridge rail is rolled flat—head up and down,—and in this example the iron is only likely to rip by becoming cold, and is submitted to far less strain than in the flange rail. In the common sort of American rails the slabs for the heads are frequently made not more than ¾ in. thick, and the rails are only single-heated. Single-heated rails require on an average about 12 cwt. of coals to ton, and double-heated about 16 ewt. The readiest method of ascertaining the way in which a rail has been piled and the thickness of the top slab for the head consists in filing a section of the rail smooth and applying dilute mineral acid to the surface. By this means the iron becomes dissolved and the cinder in the welds or joints is left intact. The strains to which rails are subject differ greatly from those imposed upon most other descriptions of manufactured iron. It therefore follows that fibrous iron, such as is used for making cable bolt, is not adapted for them, as, owing to the iron being too soft, the rails soon begin to laminate, and strips or ribbons pare off. Various means have been adopted to make iron crystaline and hard. As a rule, the more iron is rolled the more fibrous it becomes up to a certain point, and for this reason many engineers have the slabs for the heads of the rails hammered so that they may only be submitted to the drawing action of the rolls once. It has been found that by smelting the oolitic iron ores with a mixture of a cinder and clay ironstone, a peculiar description of cold short crystalized iron is produced, and this iron has been very largely used in the manufacture of the heads of the rails. To the posphorus accompanying the oolitic ores this iron owes its peculiar characteristics; phosphorus having the property of making the iron, with which it is alloyed, work soft and cold short. Rails made with this iron have been used on lines of railway with success. Although this iron is hard it is nevertheless somewhat weak, and as a hard strong iron can be made with equal advantage by the use of manganese it follows that this is a preferable ingredient to phosphorus, which reduces the strength of the iron."

Some day our railway managers will find that it is far more economical in the end to use American rails manufactured upon stringent specifications, even if it costs a few more dollars per ton. The very term, American rail, in Great Britain seems to be an expression of contempt, and very properly too, when we take into consideration the thousands of tons of worthless cinder and slag we have imported and paid for as iron rails, and so much of which has had to be removed from the track in less than a single year. If we are still to use imported rails, let us use a rigorous system of inspection and test conducive to economy and even of self-respect.—*American Railway Times.*

### Mining in Colorado.

When public attention was drawn, in the Spring of 1854, to the value of mining properties in Coloradn Territory, the history of the discovery of Gold in that region, and the conditions of the mines at that period, was imperfectly understood. The first discovery of Gold in Colorado was made in the summer of 1858, by Mr. Gregory of Georgia, who found a crevice containing dirt, largely impregnated with the precious metal, which was obtained simply by sluicing, panning, and sometimes by the old Spanish arastra. Below this dirt, the discoverer came to quartz containing gold; and, in order to work this, stamp mills, such as are still in use in that country, were found necessary. This quartz was followed for a distance of 30 feet to 50 feet, and in some places 100 feet; when the vein became charged with Sulphurets of Iron and Copper—which, in fact, is the real character of the veins in this country. At this point it was discovered that the yield in the stamp mills fell off to such an extent as in many instances to be no longer profitable.—The system of mining adopted was very imperfect, being nothing more than by open cuttings; little attention being paid to the support of the walls of the vein; such portions merely of the ore being raised to the surface as experience proved would yield paying quantities of Gold in the mill. In this way, these open cuttings become very unsafe to work in, and were liable to inundation from the surface-water during wet seasons. This peril suspended operations in many instances; and this was particularly the case when the miners came down to the Sulphurets of Iron and Copper, which it it was found would rarely yield much Gold by any known process of amalgamation. Assays, however, showed that the precious metals existed in these Sulphuret ores in even larger quantities than in the surface quartz; but, mechanically combined, and in such minute atoms, that no pulverizing, however fine, could liberate it in a form to be taken up by quicksilver. Any ordinary process of roasting, it is found, will disengage the sulphur, and, by oxydizing the ore, render the mechanical separation of the Gold more easy.

Among others, Mr. Lyon of Colorado has recently adapted the process of smelting to these ores, it is understood, with much success, obtaining a yield of from 80 to 85 per cent of all the gold and silver shown to exist by a fire assay; and his confidence is evinced by the erection of smelting works on a very extensive scale.

Many of the mines in Colorado are now being put in a condition for mining on a correct system, by proper timbering, sinking shafts on the veins, driving levels, and filling in these open cuttings or diggings; thus rendering the operation of taking down the vein at great depths a safe and easy one. Large Cornish pumps have been put down in these shafts, which easily keep them dry from the natural infiltration of water; and, with these improvements in Mining, which have taken the past summer to effect, the mines of Colorado will soon be in a condition to raise very large quantities of ore yielding from $100 to $300 per tun; and with the improvement also in handling the ore, such as dressing it, freeing it from the guangue or vein-stone, leaving nothing but the pure mineral to be treated, we may hope for returns of bullion from Colorado which will place that State in the first rank as a producer of the precious metals.—*N. Y. Tribune.*

### The La Crosse Railroad.

*A Coup de Main in Ownership—Pennsylvania Capitalists at the Bottom of it—The Good that will come of it.*

[From the Milwaukee Sentinel, 4th.

The corporation known as the Milwaukee and Minnesota Railroad Company has risen from its ashes within the past few days—or, however long it may have been since the resurrection took place, the corporeal existence of the resurrected bird has but lately been made manifest to the world at large. The new organization is headed by H. M. Alexander, well known from his prominent connection with the Pennsylvania Central and other railroads, and is backed up by such men as J. Edgar Thompson, President of the Pennsylvania Central, Jay Cook, of "National Blessing" fame, and other capitalists, whose names signify "business" wherever they go. It has already been stated in these columns that by a decree of the United States Circuit Court, held in this city last summer, the Milwaukee and Minnesota company were authorized to assume possession and control of the eastern division of the old Milwaukee & La Crosse Road, upon paying a balance of $465,000 due on the Bronson and Soutter mortgage, and giving a guaranty to apply the net earnings of the road to the satisfaction of the judgment known as the Chamberlain and Howard judgment. It was not supposed that the old company would be able to raise the required amount by the time required (Jan. 4th) until a few days since, when the full amount was deposited in the hands of the Clerk of the Court making the decree.

The funds necessary to consummate this effect were doubtless advanced by the Pennsylvania Central railroad company, or by the leading owners thereof, whose names appear on the list of directors. What combination is likely to be made in order to render the section of the road in question sufficiently profitable to induce these capitalists to stock and run it, is as yet a matter of surmise—the most profitable connection being a freight line of propellers to Erie, or a connection with the Pittsburg & Fort Wayne road at Chicago — This last would require either the good will of the Northwestern railway or the construction of a new route from Milwaukee to Chicago. In either case, if the matter were safe out of the courts, the result could not but be favorable for Milwaukee and the State. But the successful working of the Milwaukee & La Crosse road requires that the new company should be placed in undisputed possession of the western division from Portage to La Crosse; a matter which will be warmly disputed by the Milwaukee & St. Paul company, who purchased the section in question on a foreclosure sale, and who have possession of the same. A matter of $238,000 and accrued interest, alleged to be due from the Milwaukee and St. Paul road to the receiver by the Milwaukee & Minnesota for the earnings of the eastern division and its rolling stock, is still pending in the Supreme Court of the United States; so that we cannot hope to be delivered immediately from the evil effects of this railroad litigation.

The affairs of the Milwaukee and St. Paul road have been very prosperous within the past year, and the net earnings have been largely, if not entirely, applied to the improvement of the road and its facilities for transporting and storing grain and carrying passengers. A large number of box cars have been built, swelling the number to near one thousand; the road has been kept in good repair, and ample elevators have been built for the storing of grain. Since the new development which affairs have taken, this company has been very busy removing its stock and materials from the shops at the terminus of the eastern division. In anticipation of the transfer of possession, to take place to-day, about one hundred car loads of property have been removed from these shops to Portage, where it is said new shops will be established. However much the present event may have surprised all parties, the Milwaukee & St. Paul railway will not thereby be at all embarrassed in its operations or its ability to accommodate the public.

### Progress of the Branches of the Indianapolis and Cincinnati Railroad.

The extension of the Harrison Branch of the Indianapolis and Cincinnati Railroad was on Saturday last, completed to Brookville, 18 miles from Harrison, and 42 miles from this city. This branch will soon be completed to Cambridge City, its terminus, where it will connect with the Indiana Central Road. Associated with President Lord, in this enterprise, is Mr. Wm. Dwight, of Boston. Gen. Burnside's branch road, the Cincinnati and Martinsville Railroad, has been completed from Fairland, on the Indianapolis and Cincinnati Road, twenty miles this side of Indianapolis, to Martinsville, a distance of thirty five miles. This road will, probably, be extended to Terre Haute. It is being constructed under the personal supervision of General Burnside, who is a most energetic manager. Providence capitalists are interested in this enterprise.

These two roads, used in connection with the Indianapolis and Cincinnati Road, will open to our city some of the richest and most productive districts of Indiana. The Harrison Branch was completed to Harrison just two years since, and it has already proved a great success. It will be constructed the entire distance along the tow-path of the old canal, fifty-six miles, to Cambridge City. The ladies of Brookville are preparing to celebrate the opening of the road to their town by a grand ball, intended to be *the* event.

### Missouri Railroad Fever.

The people of the interior appear to be laboring under a severe malady, which may be properly called the railroad fever. They are holding meetings in nearly every county, organizing companies and preparing surveys for lines of road to cross and recross the State at random, so as to get a track beside every man's back door, if possible. Of course this is all moonshine. Amid all the excitement, however, there are a few railroad schemes not only plausible but exceedingly promising. The Kansas City and Fort Scott road is one of them, designed to tap the rich section of country commonly known as the Indian Territory. The extention of the Iron Mountain Railroad to a point opposite Columbus, Ky., is also another good thing. The road is bound to be built, and will unquestionably prove a good thing.—*Cor. Cin. Com.*

### The Manufacture and Tax upon Gas in Cincinnati.

The number of feet of gas manufactured by the Cincinnati Gas-light and Coke Company in 1865:

| | Cubic feet. | | Cubic feet. |
|---|---|---|---|
| January | 29,391 073 | July | 13,327,140 |
| February | 18,436,479 | August | 9,916,802 |
| March | 23,650,230 | September | 17,441,425 |
| April | 14,052 044 | October | 16,023,600 |
| May | 17,243 190 | November | 27,833,530 |
| June | 9,7?5,254 | December | 23,080,953 |
| Total number of feet | | | 229,781,749 |

Amount of tax paid by the Cincinnati Gas-light and Coke Company on gas manufactured in 1865 (25 cents per 1,000 feet paid to April 1, and 30 cents per 1,000 paid after April 1):

| | | | |
|---|---|---|---|
| January | $7,347 76 | July | 3,998 15 |
| February | 4,609 12 | August | 2 974 80 |
| March | 5.912 56 | September | 5,232 43 |
| April | 3,864 05 | October | 4 807 08 |
| May | 5.172 95 | November | 8 330 66 |
| June | 2,935 58 | December | 7,104 28 |
| Total | | | $62 308 82 |

### Receipts of Street Railways in Cincinnati.

Returns made by Street Railroad Companies of Cincinnati to the Assessor of the First District, for the year 1865, of the gross receipts, on which two and a half per cent. tax is paid:

| | Cin. Street R. R. Seventh & Freeman st. line. | City Pass. R R. John st. line. | Passenger R. R. Third & Fourth st. line. | Pendleton and 5th st. line. |
|---|---|---|---|---|
| January | $7,132 | $7,621 | $4,804 | $4,818 |
| February | 7.171 | 7 437 | 3,575 | 5,388 |
| March | 9,069 | 9,303 | 4,817 | 7 124 |
| April | 9,473 | 9,635 | 5,096 | 7,610 |
| May | 9,841 | 10 622 | 5 170 | 7 812 |
| June | 10,514 | 11 278 | 5 360 | 8 506 |
| July | 10,704 | 11,820 | 5.411 | 9,008 |
| August | 10,231 | 11,058 | 5 915 | 9,063 |
| September | 10,956 | 12,115 | 6,086 | 9,600 |
| October | 10,603 | 11,426 | 5,666 | 9,072 |
| November | 9,899 | 10,342 | 5,200 | 7,836 |
| December | 9,953 | 10,4 6 | 4,955 | 7,512 |
| Total | $115 596 | $124,043 | $61 355 | $95,229 |

### Railroad from Washington to the Point of Rocks.

We are glad to state, upon the authority of Mayor Wallach, that Mr. Garrett, President of the Baltimore and Ohio Railroad Company, has assured him of the intention of the management to run the contemplated branch from the Point of Rocks straight into the city on Seventh or Fourth street. The surveying party is now in the neighborhood of the Carroll Cottage, some eight miles hence.—*National Intelligencer.*

### Death by Railway Accidents.

So far, says an exchange, as we have any record of the railroad accidents of last year, 1865, there appears to have been one hundred and eighty-three of them. This is a greater number than occurred in the previous year, when the whole number of the publicly recorded railroad accidents was one hundred and forty. The number of lives lost in 1865, however, was less than in 1864, being three hundred and thirty five for the former year, and four hundred and four in the latter. It is encouraging to find that the mortality is decreasing, although the number of accidents is increasing. As far as this change for the better goes, we call attention to it, and give the railroad companies the credit for it, and hope that, while they are on the mend, they will try every means to do better in 1866.

### The Atlantic and Great Western Railway. A Six Feet Gauge to Chicago.

One of the practical results of the recent excursion of English capitalists through the United States is already being developed. Sir Morton Peto is in the market asking for a loan of thirty millions of dollars to be expended in the United States in extending the Atlantic and Great Western Railway. The bonds, which are to draw eight per centum interest, are rapidly being subscribed, for Sir Morton Peto's recent trip has convinced him that New York, St. Louis and Chicago are the three great commercial centers of the continent, and that a railroad which should connect these three, making New York its eastern terminus, and the two latter cities the termini of its western branches, would be one of the greatest and most successful in the world. His scheme, then, comprehends nothing less than the building of a double-track, broad-gauge railroad which shall connect New York with the two greatest cities of the interior. The broad-gauge route from New York to St. Louis is completed, and will soon be double-tracked. To the completion of the new route, should Sir Morton succeed in procuring the necessary funds, will be given all the energy which marked the construction of the present one.

The people of Chicago and the West hail the prospect of a double-track connection with the East, as an immense increase of the outlet for breadstuffs, and a consequent reduction in the enormous charges made by western railroads for transportation of freight. Cleveland may have equal though different reasons to congratulate herself upon the project.—Should it be successful, the most feasible and probable route to Chicago will be a continuation of the branch of the Atlantic and Great Western Railway terminating in this city, over the line now occupied by the Cleveland and Toledo and Michigan Southern roads to Chicago. Cleveland would thus be placed on what will undoubtedly become the great broad gauge route between the East and West, and will reap rich business advantages from the conjunction of this new railroad enterprise with her present marine and commercial advantages.—*Cleveland, Ohio, paper.*

### The Northern Pacific Railroad.

BOSTON, January 19.

Hon. J. G. Smith, ex-Governor of Vermont, and Manager of the Vermont Central Railroad, has been elected President of the new Board of Directors of the Northern Pacific Railroad Company. The general offices of this company have been opened in Boston under the new management. The entire railroad interest of New England has become closely identified with the Northern Pacific Railroad, the construction of which will be commenced at the earliest moment.

### English Rolling Stock.

The rolling stock of the railway companies of Great Britain consisted at the end of 1864, of 7,203 locomotives, 16,982 passenger carriages, 6,506 other vehicles attached to passenger trains, 204,880 wagons for conveyance of live stock, minerals and general merchandise, with 8,036 carriages or wagons of other sorts; being a total of 243,610 engines, carriages, wagons and vehicles, which, placed buffer to buffer, would probably extend somewhere between 600 and 700 miles, or from London into the Scottish Highlands.

### Ship Transit Around Niagara Falls.

Horace H. Day, Esq, has visited the cities of Chicago, Milwaukee, Detroit, Toledo and Cleveland, and presented to them his plans for a ship canal around the Falls of Niagara, by which ships of at least 1,200 tuns burden can be passed from the lakes to the St. Lawrence river, and thus to the Atlantic ocean. The following is a brief synopsis of Mr. Day's plan, and its claimed advantages, as explained to the Chicago Board of Trade:

If the State of New York can furnish five or six feet of water, then through the same channel, by my system, we can furnish fifteen feet and carry as many vessels past the lockages and elevations. If by my system such a result is obtained, you will all readily understand that the matter is of grave importance. We do not use locks in one sense of the word. The end of the canal built on this principle is closed up and no water is intended to pass. The canals necessary for steam transportation will require to be lined on the sides, either by stone or wood, and hence they are different from ordinary canals. But the passing from one elevation to the other is accomplished by the use of double inclined planes, each one having 8, 10 or 12 tracks, according to the size of vessels proposed to be transported. We have selected ten as a proper number for a vessel of 1,200 tuns.—These tracks are made of timber, and on them rollers are placed, which remain stationary and move on their bearings. The track is placed upon the car or lock, thus reversing the usual order. The vessel is raised from the canal in three or four ways. I propose what is called the screw dock, or more properly the hydrostatic pump dock, because I am informed by those who build them, that it is possible to raise a vessel of the size contemplated, in the short space of ten minutes, sufficiently to go on to the inclined plane.—When a vessel at one end of the plane is to be raised, another at the other end can be raised at the same time, and thus the time consumed in passing two vessels is only the time of passing one. As one vessel is ready to descend the plane another is ready to ascend, and the connecting machinery of rope or wire cables will be acting at the same moment upon both planes, raising one vessel up and lowering the other down. Eminent engineers declare it practicable to pass two ships in this manner in the short space of half an hour. It is well known that 320 feet of lockage for such sized vessels as are here contemplated, will take, through common locks, in the neighborhood of form 20 to 24 hours Calling it 40 hours to go up and down we accomplish the same thing by my plan in half an hour, certainly in one hour. Thus we save more than one and a half days in the round trip from lake to lake. Merchants with whom I have conversed say that the value of the charter of a ship of this size is about $400 a day. Of course a day and a half would be $600, and if we allow one-half of that amount for the value of the quick passage we obtain $900. These figures may be large, but you understand them better than I do in their application to the trade in which you are engaged, and can correct them in your own minds. If we can pass forty vessels a day, and I contend that we can pass forty-eight each way, we have the enormous sum of $36,000 saved to somebody in twenty-four hours. Then multiply this by 220 days, and we have between seven and eight millions of dollars saved in the season of navigation, while it may be three or four times as much. The cost of these locks is estimated at from seven to eight millions of dollars.

To the President and Directors of the Board of Trade of the City of Chicago:

Your committee to whom was referred the plan of passing around Niagara Falls by means of a canal and inclined planes, as proposed by Horace H. Day, Esq., would respectfully report:

That, in their opinion, the plan is entirely feasible, and, in view of the great saving of time and expense to the commerce of the country, worthy of the most favorable consideration. With reference to the question of a mechanical nature that will arise with regard to the mode of applying the power requisite to transport vessels over the plane, and the forms of structure necessary for this purpose, we recommend that the opinion of the best mechanical engineers in the country be obtained on the subject.

CHICAGO, January 5.

### Railroad Freights.

Farmers continue to assemble in conventions, and merchants to meet in committees, upon the subject of railroad freights. They act and talk as if by this sort of proceeding they would change the cost of transport between the prairie and the sea, the mountain and the plane; but conventions and committees will no more regulate the price of carrying than they will that of weaving or plowing. If railroad managers place their tariff too far above the actual necessities of the case, they will as soon find it out, and be compelled to reduce it, by the force of circumstances, as will merchants when they put too high a price upon a yard of cloth, or as farmers will when they hold corn at too many cents per bushel What we object to in this matter is the evident effort of some newspaper writers and some country talkers to array the producing community in bitter hostility to the transporting and commercial classes. There is, of course, no objection to discussion of this or any other subject of public interest; discussion should be encouraged, when it leads to enlightenment, but the illiberal, ignorant, vindictive tone which characterizes most of what has been already said and done in this matter of railroad freights, affords no enlightenment, and leads to no good results.—*Chicago Commercial Express.*

### Over Broadway.

Mr. R. Montgomery, No. 24 Broadway, has patented an Iron Street Railway, to be supported on bent pillars of corrugated wrought iron—one track on each side of the roadway, or between the sidewalk and the usual carriage way. This track is to be 17 feet above the roadway, with which it in nowise interferes; taking only so much of the sidewalk as is now obstructed by lamp-posts, awning-posts, &c. Of course, the passage of teams *across* the street traversed is nowise impeded. The propelling power is supplied by a dummy engine which is entirely voiceless and sparkless. The scheme looks feasible; it does not seem likely to excite much opposition; and the railroad if painted and bronzed, would be a decided ornament to the street. A light staircase at one corner of each street affords the requisite facility for reaching and quitting the cars. The plan has been examined and approved as feasible and unobjectionable by Horatio Allen, Miers Casyell, and others eminently qualified to judge of its merits.—*N. Y. Tribune.*

### Sandusky, Mansfield & Newark Railroad Annual Meeting.

At the annual meeting of the stockholders of the Sandusky, Mansfield & Newark Railroad Company, held at their office in Sandusky, the following persons were elected Directors for the ensuing year:

C. L. Boalt, of Norwalk; John Gardner, of Norwalk; H. P. Warden, of Sandusky; E. B. Saddler, of Sandusky; S. M. Robinson, of Plymouth; L J. Tracy, of Mansfield; James Lyon, of Hebon; J. Buckingham, of Newark, and J. W. Sprague, of Huron.

At a meeting of the new Board the following officers were elected:

President—Hon. C. L. Boalt.
Superintendent—James H. Stewart.
General Freight Agent—H. P. Warden.
General Ticket Agent—H. M. Bronson.
Treasurer and Paymaster—L. P. Wheelock.

### An English Tank Engine.

A new locomotive of a peculiar pattern has recently been constructed in England. It is a tank engine, without a tender, and is designed to haul heavy trains up grades. According to the *Engineer*, it is a cumbrous ugly-looking machine, as our readers will surmise from the following details.

The firebox occupies the center of the engine, and there are, so to speak, two boilers, or rather, one boiler formed like two, set with the fireboxes touching each other. There are two funnels, one at each end of the machine, and two bogey trucks, with wheels 4 feet 6 inches diameter. The cylinders are four in number, 15 inches diameter, by 22 inch stroke, and the weight of the whole machine is 42 tons. The firebox is 6 feet 6 inches long, by 3 feet 3 inches wide; and the boiler is 48 inches diameter, and has 198 brass tubes, 2 inches diameter and 9 feet long.—The aggregate fire surface is 2,000 feet.

This engine was tried under adverse circumstances, being taken from the shop just as the workmen put it together, without any adjustment, and took a load of 300 tons up an incline of 1 foot in 77 feet, the pressure being 100 pounds; and again, with the same load, it raised an incline of 1 in 85, but stuck nearly at the summit from the steam falling. When it rose a few pounds, the engine readily ascended to the top.

It is also easily run round curves of 190 feet radii, and is accounted to be in general an improvement in engines of its class.—*Am. Railway Times.*

### Savannah, Griffin and N. Alabama R. R.

Among the railroad enterprises of the Southern States, no one is more important than the Savannah, Griffin and North Alahama Road, completing a direct line between Savannah and Memphis. The grading is almost finished between the former place and the Chattahoochee river. The track lies through the coal fields and copper mines of North Alabama, which, when developed by this convenient means, of transportation, will furnish inexhaustible sources of freight that can find an outlet in no other direction. The Savannah Republican says it is bound to be, from its position and the force of circumstances, the road of roads in the South.

### The New Locomotive Nathaniel McKay.

Messrs. McKay & Aldus were the first who built a side wheel steamer in this vicinity, and now they have the honor of having produced the first locomotive ever built in East Boston. It is designed for the Concord, Manchester & Lawrence Railroad, and Governor Gilmore, the superintendent of the road, was so pleased with it that he determined it should be named after the principal of the firm who built it.—It was built under the superintendence of Mr. B. W. Healy, for many years foreman of Mason's locomotive works at Taunton, and is considered by competent judges as nearly perfect as any locomotive in the country. It is 22 tuns, has cylinders 14 inches in diameter, with 22 inches stroke; the boiler is 42 inches in diameter, with 11 feet flue, is cased in the very best of sheet-iron and hooped with brass; the wheels are 5 feet in diameter, and together with the trucks have oval spokes cast hollow, and it has a fire box of 48 inches. The truck wheels are of Lobdel's patent; the slides, crank pins, piston rods and other running parts are made in duplicate, so that they can be easily replaced; the tyres are 2¾ inches thick and are of Vicker's steel.

The steam-dome, sand-box, air-chambers, feed-pumps, valves and railings are of brass, the whole surmounted by a handsome bell, and the place for the lantern, as usual, is before the boiler. The cab is compact and very neat, with plate-glass windows, and is painted deep green, relieved with ornamental flowering, and gilt-work. The workmanship is not only strong and neat, but beautiful, and reflects the highest credit upon those who produced it. The tender is also finished in superior style, with all the modern improvements.

This enterprising firm have now on hand orders for five locomotives of from 28 to 30 tuns, designed for service in the Lehigh Valley, are rebuilding four others for the Fitchburg Railroad, and anticipate heavy orders soon from the West for more. They are also making the engine and building the hull of a steamer of 1,100 tuns for service on the river Platte, and have much other work on hand, keeping about 300 men employed.—*Boston Traveller, Dec. 15th.*

### Diluted Stocks.

The process of "watering" a corporation's stock is very familiar to those who interest themselves in promoting new organizations. But perhaps the most glaring examples of this kind of thing are those furnished by our street railroad companies whose stock has been put through a system of dilution so thorough as to almost render invisible the original cost of the property. A careful inquiry has brought to light some facts and figures in this regard which have a public interest beyond the locality where these frauds (for such they really are), have been perpetrated.

The Third Avenue Railroad cost only $463,000 for its construction, but the company has issued $1,250,000 worth of stock, and every share is worth a market value of $300, or three times its par value. In other words the public pays the road, at present rates of fare, enough to enable the company to make dividends, practically, on $3,750,000. And yet the road cost only $750,000, at the most liberal estimate of construction and running stock. The Second Avenue Railroad cost for construction and equipment $300,000, paid in bonds. In addition, the company has issued stock to the amount of $619,050, and bonds to the amount of $100,000. The concern is a miserably managed affair, but by this watering process, the nominally small dividends paid are really made to pay a very large interest on the original cash investment. The Sixth Avenue Railroad cost less than $250,000, but has been watered up to $800,000, and even at that, shares sell at $135. I may say here, *par parenthese*, that an irrepressible conflict is impending, in the form of competition for the presidency of this company, and a lively time is expected at the election early in February. Mr. Theron R. Butler, an Ohio man of brains and business capacity, is the candidate of one of the rival factions The watering process has been perpetrated in the case of the Seventh Avenue Road, quite as liberally as in those already cited. This road cost, probably less than $500,000, while it has a nominal capital of $2,500,000. But the Eight Avenue Road "bangs the beater" in this matter; for upon an original expenditure of $130,000, stock has been issued to the amount of $850,000, all of which sells at $150 a share. As handsome dividends are declared upon this large capital, it won't require very extensive mathematical calculations to see that the original investors are making a very good thing. Next comes the Cross-town Railroad, which issued $600,000 stock at the outset, but has only required ten per cent. to be paid up. With the $60,000 thus raised, it purchased the necessary rails and switches, and then issued bonds vastly in excess of the amount required to build the road. The first year this line was in operation, it paid a dividend of twelve per cent. out of its profits, and its stock is held at $140. Such is a summary of a single branch of this stock-watering business. The system is a part and parcel of most of the capitalizing schemes of these speculative times, and, in oil and mining operations, it is notorious that "hard-pan" is earnestly sought after by persons disposed to invest. And, of all *watering* places extent, New York may put in a strong claim to prominence, if the above examples are considered

### Memphis & Ohio Railroad.

The work on this road, we are glad to learn, says the Memphis Commercial, is being "rapidly pushed forward to completion. The bridge over the Hatchie, five miles this side of Brownsville, will be finished within two days, when the cars will run through to Humbolt, connecting with the Mobile & Ohio Railroad to Columbus, Kentucky. Much credit is due to Superintendent Jones, who, amid many embarrassments from the want of means and obstacles apparently insurmountable, has carried through to a successful completion, a work which will be an enduring monument to his energy, perseverance and skill, and a lasting and inestimable benefit to the business interests of Memphis."

Little Miami Branch R. R.—The citizens of the town of Lebanon have subscribed one-half of the amount required in the proposition of the Little Miami Railroad Company, to build the desired railroad from Deerfield through Lebanon. The Lebanon people think they have contributed their share of funds for this enterprise, and now call upon the farmers and land owners in Warren county to contribute the balance required. If the full amount is not obtained, it is proposed to have the county seat of Warren county changed from Lebanon to some other point.

### Severe on Railroad Companies.

The Paris correspondent of the London Morning Advertiser gives the following bit of railway news:

It is pleasant to mark a growing disposition on the part of the tribunals to make railway companies and railway directors responsible for their negligence. The Tribunal of Commerce tried yesterday an action brought by M. D. Mayher and Havard against the Orleans Railway Company to recover damages laid at 1,500f., for the loss and inconvenience caused to them by the arrival of a train after time. The plaintiffs, on the 5th of March last, took tickets for Pau by the mail train, but owing to the heating of an axle of the Postoffice van the train was delayed at Poictiers, and so arrived at Bordeaux too late for the train to Pau. For the inconvenience and loss of time thus caused the plaintiffs claimed damages as above stated.

The counsel for the company pleaded that the circumstance which had produced the delay was one of those inevitable accidents which relieved his clients from all responsibility. The Tribunal, however, refused to admit this plea, on the ground that the heating of an axle must arise either from a defect of construction or from negligence, and might be avoided by proper care. It therefore declared defendants responsible for the real loss caused to the plaintiffs, which it estimated at 200l., and accordingly condemned the company to pay that sum, with costs.

Managers of American Railway Companies have reason to be thankful that French law does not extend to this country, for if it did there would soon be bankrupted railways—or fewer heated axles.

### Peat.

The feasibility of using peat on railroad locomotives was tested on engine No. 261, of the New York Central Railroad. The trial was made under the supervision of Superintendent Thomas Wallace. The locomotive drew ten freight cars from Troy to Schenectady in fifty minutes. This is better time than is usually made, and the experiment in that respect resulted successfully. One difficulty was the ceaseless labor required on the part of the fireman to keep the furnace supplied. The blocks are about the size of an ordinary brick, and shoveled with great difficulty, and as they burned very fast, required a constant opening of the furnace door, which had a tendency to keep the steam at a low point, necessitating very severe labor on the part of the fireman. Undoubtedly this could be remedied by moulding the blocks the size of a stick of wood.

Canal Project in Canada.—A project is on foot to unite Lake Ottawassaga with Lake Ontario at Toronto, by a canal running entirely through Canadian territory, but designed as a carrier; also, to benefit the people of the United States, by facilitating the delivery of Western produce at our seaboard. The canal is to be fed by Lake Simcoe, and to be about 100 miles long, saving a water journey by the St. Clair Flats of about 420 miles. An act of Parliament incorporates the enterprise under a liberal charter, and only $40,000,000 of capital are required to execute the work. It is expected that the Canadian Legislature will make a large grant of land in aid of the enterprise.

## RAILROAD ITEMS.

A new car couple, invented by G. E. Clark, of Racine, Wisconsin, relates to the class which are termed self acting, and consists in a novel arrangement of shackles or links, springs, and a shackle-releasing mechanism, whereby the adjoining cars when coming in contact, will be coupled with certainty, and readily uncoupled at any time when necessary, and made to uncouple or disconnect itself in case of a car being thrown from the track, so that the said car cannot drag the others connected with it from the track.

NASHVILLE, Jan. 18.—A meeting was held at the Capitol to-night in favor of a railroad direct from Nashville to Knoxville, to be called the Tennessee and Pacific Railroad.—Speeches were made by various gentlemen, setting forth the advantages of such a road, and giving glowing descriptions of the resources of the country through which it would pass. A series of resolutions were adopted, and a committee appointed to confer with the Legislature upon the subject.

ST. LOUIS, Jan. 18.—Platte county, Mo., has brought suit against Col. Osborn D. Carpenter for $50,000, with a view of canceling the mortgage executed by the Weston & Atchison and Atchison & St. Joseph Railroad companies, in favor of Wm. C. Wetmore and John A. Stewart, of New York, as trustees to secure an issue of bonds amounting to $1,200,000, which it is alleged have been fraudulently executed.

This morning the Mississippi Valley Transportation Company filed articles of association with the Secretary of State, at Spring field, on the 20th. The company has a capital of half a million, and is formed for the purpose of navigating and carrying freight, passengers, &c., upon the Mississippi river, from its source to its outlet, as well as upon the rivers, lakes and canals tributary thereto.

The Louisville, New Albany and Chicago railroad company offer at private sale the unfinished line of the branch road, commenced to be constructed by said company from the town of Gosport, in Owen county, toward this city. The right of way has been procured, and about twenty miles of the line between Gosport and Mooresville is in a great part graded and bridged.—*Indianapolis Journal.*

The Georgia Central makes a bad exhibit for the last quarter. The rolling stock is in bad order, and widely scattered; 151 miles have been put in repair; 138 miles of track and bridges were destroyed during the war. The company has heretofore labored under many difficulties in reopening the road, but these being removed, repairs will now go steadily forward.

Several arrests of parties were made at East St. Louis on the 17th, who have been systematically robbing the Ohio and Mississippi Railroad of freight amonnting to $100,000, which the railroad and transfer companies have had to pay for. The parties are now in custody.

The name of the Knoxville Railroad has been changed to the Tennessee & Pacific Railroad, the intention being to connect it by way of Memphis and Little Rock with the Southern Pacific road through El Paso.

The Canada Gazette has a notice that at the next session, Parliament will be asked to sanction the amalgamation of the Buffalo and Lake Huron Railroad from the Grand Trunk. It is not likely that there will be any opposition to this, and in this way the Trunk line will acquire control of, and use as branches, the smaller roads that connect with it.

The strike of the engineers and firemen on the Michigan Southern Railroad has resulted in their discharge, and the hiring of others. Some freight trains were detained twenty-four hours by the strike—no passenger trains. All are running now as usual.

The Mississippi Central railroad company have decided to build their machine shops at Water Valley instead of at Holly Springs, where they were before the war. The company is now running but three trains a week on their road. Some waggish fellow calls it the "Fast, *Tri-weekly* Broad Gauge Railway."

The receipts of railways in the United Kingdom of Great Britain amounted to, for the week ending the 16th of December, on the 12,299 miles, £665,154, and for the corresponding week of last year, on 11,899 miles, to £611,613—showing an increase of 410 miles and of £53,541.—*Herald.*

The Albany and Susquehanna Railroad has been completed to within two miles of Otsego Otsego county. It is delayed at this point by the incompleteness of a bridge on the Susquehanna river. The bridge will, however, soon be finished, and the road will be pushed along to Unadilla, reaching that place about the 1st of March.

The Chicago Board of Trade have adopted a memorial to Congress, asking for a grant of 20,000 acres of the public lands to aid in the construction of a ship canal from Sturgeon Bay, Wisconsin, to Lake Michigan. The proposed canal would be less than two miles in length.

$1,000,000 has been furnished by the counties between Kansas City and Fort Scott, to aid the Missouri River, Fort Scott and Gulf Railroad. This will complete the road to Ft. Scott, 100 miles south of Kansas City.

The prospects of the Indianapolis and Vincennes railroad are excellent. Morgan, Knox, Owen and Greene counties will furnish the remaining $300,000. The Bellefontaine line endorses the project warmly.

It is proposed to extend the Milwaukee and Watertown Road, by Lodi and Merrimac up the Baraboe Valley.

A new railroad is projected from or *via* Des Moines through Storey, Hardin, Cerro Gordo, and other counties, to the Minnesota line.

It is expected that cars will be running to Chariton, Lucas county, on the Burlington and Missouri Railroad by 1st June, 1867.

$25,000 was subscribed in Albany, on the 10th inst., for the Oswego, New York & Midland Railroad, and 10 per cent. paid in.

The Grand River Railroad is to be extended to Michigan, the center of the Michigan lumber region.

Work was commenced on the Cameron road, January 1st. The citizens of Leavenworth are agitating the project of a road to Cameron, also.

A canal connecting the Mississippi and Illinois rivers and running nearly on the line of the Chicago and Rock Island Railroad, is proposed.

The Hudson River Railroad Bridge, at Albany, is nearly complete. The workmen have commenced the construction of the draw.

The Mobile and Ohio Railroad has commenced running daily trains—time from Columbus to Mobile, thirty-six hours.

It is reported that the Winchester, Virginia, Railroad has passed into the hands of the Baltimore and Ohio Railroad Company.

Another railway across the Isthmus of Tehuantepec is projected.

## PERSONAL.

Mr. J. H. POTTER has been appointed Superintendent of the Sandusky, Dayton and Cincinnati Railroad. Mr. Potter was for many years a popular conductor on the Cincinnati, Hamilton & Dayton Railroad, which position he resigned and took charge of the Nashville and Chattanooga Railroad. After a stay he returned to this city, and accepted his present situation. Mr. Potter is a thoroughly practical railroad officer. He has risen from the ranks, through merit, and will make a popular and efficient executive officer, which that road was much in need of.

## California and Oregon Railroad.

Representative Bidwell, of California, introduced a bill, on the 18th, granting lands to aid in the construction of a railroad and telegraph line from the Central Pacific Railroad in California to Portland, Oregon, which will probably soon be favorably reported on by the Select Committee on the Pacific Railroad. The bill also authorizes the Puget Sound and Columbia River Railroad Company to construct a road to unite with others on the Pacific coast. The usual grants of lands and other privileges are conferred.

## Metropolitan Underground R. R. Company.

Mr. Pierson's bill, names as corporators, James B. Johnston, Joel Wolfe, John Thompson, Thomas Reed, John Hunter, Henry E. Davies, Rodney W. Daniels, James B. Brismade and Arthur W. Benson. The object of the corporation is to construct and maintain a railroad under Broadway and certain other streets, with double or single track. The capital stock to be not less than $8,000,000, with power to increase it to $12,000,000.

THE NORTHERN PACIFIC RAILROAD COMPANY. —*Boston Jan.* 5 —The reorgonization of the Directors of the Norihern Pacific Railroad Company was effected to-day. The control and management of this great interest has passed into the hands of the representatives capitalists of New England, who will prepare for the vigorous prosecution of the work.

## MONETARY AND COMMERCIAL.

The market for money during the past week has been close, and those who stood most in need of accommodations found it very difficult to obtain them through the regular channels. There seems to be a sort of general apprehension that there is great danger of a financial crisis, making lenders extremely cautious as to whom and upon what security they grant loans. Under ordinary circumstances, the effect of such a course could be foretold, but in the present condition of the country, when the people are in general free from debt, we do not apprehend any serious disturbance, beyond temporarily checking the spirit of speculation that has already been perhaps too freely indulged. The present prices of commodities may not be sustained, and many parties may be forced to the unpleasant conclusion that they are not worth more than two-thirds what they supposed, but we deem it almost impossible that the active production of valuable commodities or manufactured goods or the elements of wealth obtained from agriculture, can be in any material manner checked by the present stringency; and although some few who have been overstepping the bounds of prudence may be forced to adopt the dernier resort, yet we feel confident that the great mass of the business community of this country are to-day stronger, and in a safer conditon, than they ever were since the birth of the nation. The nominal rates of interest, in Bank, are from 10 to 15 per cent., but much good paper is discounted by outside operators at from 1½ to 2 per cent. a month.

The gold market has not varied much during the week, the entire fluctuations not being over 1¼ cents.

The quotations for Exchange are as follows:

| | Buying. | Selling. |
|---|---|---|
| N Y. Exch | 50c per M dis@par. | par@50c per M. |
| Philadelphia | 50c per M dis@par. | par@50c per M. |
| Boston | 50c per M dis@par. | par@50c per M. |
| Baltimore | ¼@.....dis | 1-16@....dis. |
| Silver | 31 @34 pr. | 34 @36 pr. |
| Gold | 38¼@38⅝ pr. | 39¼@39½ pr. |
| Certificates | 2 @2⅛c dis | 1 @..... |

All departments of business are dull, and the orders being filled are small parcels to sort up stocks.

Of the New York Stock market the *Tribune* of Tuesday says:

"Government stocks are fairly sustained on all the issues. The 7-30s are quoted 98⅞@99¼. The Railway share market is generally lower and feverish; Cleveland and Pittsburgh opened at 89 and closed at 81½@81⅝; Erie opened at 87 and closed at 86¾@86⅞, and Michigan Southern at 69. The market is still wholly controlled by speculating brokers, and the public is not disposed to operate in either direction. At the Second Board prices were generally lower, and closed at 4 p. m. as follows: Cumberland Coal, 46@46½; Quicksilver, 40@41½; Mariposa, 14⅛@14½; New York Central, 91¾@92; Erie, 86¾@86⅞; Hudson River, 103@103½; Reading 100¾@101; Michigan Southern, 69⅛@69½, Cleveland and Pittsburgh, 81½@81⅝; Rock Island, 100¾@101; Northwestern, 31¾@31⅞; Northwestern Preferred, 56½@56¾; Fort Wayne, 93¼@93½.—At 5½ p. m. there was a still lower range of prices: Erie sold at 85⅝; Cleveland and Pittsburgh, 79¾, and Michigan Southern, 68⅝@68¾."

The Coal stocks of the Schuylkill region appear to be strengthened by the arrangements recently made by the Reading Road, for reaching New York on the Morris & Essex. The distance from Pottsville to New New York, by this route, will be some 25 miles less than the distance from New York to Wilkesbarre, so that miners in that region can avail themselves advantageously of both the New York and the Philadelphia markets

The Connecticut River Railroad makes the following report for 1865:

| | | | |
|---|---|---|---|
| Earnings | $533,108 | Expenses | $315,757 |
| Net income | | | $216,351 |
| The increase in earnings was | | | 45,884 |
| The increase in net income | | | 14,910 |

The Chicago and Rock Island Road earnings for the second week in January show a decrease of $22,800.

### Railroad Earnings.

The following are the earnings of the Erie Railroad for 1865:

| | |
|---|---|
| January | $908,341 |
| February | 886,039 |
| March | 1,240,626 |
| April | 1,470,120 |
| May | 1,339,267 |
| June | 1,225,528 |
| July | 1,152,803 |
| August | 1,364,126 |
| September | 1,345,456 |
| October | 1,40 ,387 |
| November | 1,451,217 |
| December | 1,503,993 |
| Total | $15,295,915 |
| Same time 1864 | 13,429,643 |
| Increase | $1,866,272 |

The Cleveland & Pittsburg Road showed in December a decrease of $22,000 in earnings. The Chicago & Alton Road shows, the first half of January, 1866, a decrease of $31,000.

The New Jersey Railroad and Transportation Company has declared a dividend of 5 per cent.

The earnings of nearly all the railroads, as far as reported, for the first week in January, shows a decrease as compared with last year.

The Cleveland, Columbus and Cincinnati Railroad Company declared 3d January their half yearly dividend of 5 per cent. payable February 1. The Firemen's Fund Insurance Company has declared a dividend of 3¼ per cent.

The Northwestern earnings show $24,000 decrease in the second week in January.

The Michigan Southern in the second week in January falls off $6,170, and the Detroit and Milwaukie road $5,732.

The Pennsylvania Coal Company report as follows the shipment of Pittston coal to January 13:

1866 13,721.58 tuns | 1865.7,205.08 tuns | Inc.6,523.07 tun

The Michigan Central Road earned the second week in January:

1855.....$65,339—1866,... $61,463 | Decrease. ...$3,876

The receipts of the Racine and Mississippi and Northern Illinois Railroads for the week ending January 7, were:

1866....$10,016 30 | 1865....$10,594 10 | Dec....$577 30

The traffic of the Great Western Railway of Canada for the week ending Jan. 12, was:

1866.$61,379 98 | 1865.$47,126 30½ | Increase..$4,253 67½

The total amount of traffic of the Atlantic and Great Western Railway for the month of December was:

1865....$599,762 | 1864....$357,556 | Increase...$242,206

### Statement of Approximate Earnings of the Marietta and Cincinnati Railroad for the 2d Week in January, 1866.

| | 1866. | 1865 |
|---|---|---|
| Passengers | $ 8,462 00 | $ 9,070 53 |
| Freight | 9,3'0 00 | 11,802 73 |
| Mail, express & telegraph | 1,1 0 00 | 1,186 33 |
| Total | 18,872 00 | 22 059 59 |
| Total this month to date | 41,602 00 | 42,603 38 |


**WRIGHTSON & CO.**

# Printers,

167 Walnut St., Cincinnati, O.

## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch

For Rates, Bill of Lading, or any information desired shippers will please apply to

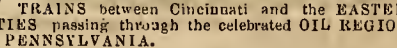
H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

## Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:0 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

# RAILROAD OFFICES AND AGENTS

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord, General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A B. Waters, Freight and Ticket Agent, Cor. Third and Walnut

**Ohio & Mississippi**

W. E. Bruce, Freight and Ticket Agent, Gagette Building, 82 West Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J. R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg Contracting Agent, Vine St. under Burnett House.
H. J. Page, General Freight Agent, at Chicago.

**Indinnapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 65 W. Third St.
Sydney Rice, Contracting Agent, ", "

**Central Ohio & Pittsburg, Columbus and Cincinnat**

James E Shields, General Agent, No 77 W. Third St.

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway,**

A. J. Day, S. W Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burnet House.

**New York Central.**

G. B Gibson, S. W. Passenger Agent. W. H. Page, Local Passenger Agent, 8 and 9 West Third St.
Gen. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Pittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent, No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.

# 1865.

## CHANGE OF TIME!

By the Broad Road Gauge Route, the

# Atlantic & Great Western R'y.

## TWO THROUGH TRAINS DAILY

TO

## EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI | 9:00 A. M. | 10:40 P. M. |
| HAMILTON | 9:57 " | 11:43 " |
| DAYTON | 11:30 " | 12:55 A. M. |
| SPRINGFIELD | 12:35 " | 1:45 " |
| URBANA | 1:40 P. M. | 2:15 " |
| GALLION | 5:25 " | 6:10 " |
| MANSFIELD | 6:50 " | 7:15 " |
| AKRON | 9:30 " | 10:00 " |
| RAVENNA | 10:05 " | 0:40 " |
| LEAVITTSBURG | 11:00 " | 11:40 " |
| GREENVILLE | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE | 1:20 " | 2:30 " |
| CORRY | 2:45 " | 3:55 " |
| Arrives SALAMANCA | 4:58 " | 2:55 " |
| NEW YORK | 10:30 P. M. | 1:00 " |
| BOSTON | 2:30 " | 8:00 A. M. |
| PITTSBURGH | 2:20 A. M. | 3:20 P. M |
| HARRISBURG | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA | 5:35 " | 6:55 " |
| BALTIMORE | 5:45 " | 7:00 " |
| WASHINGTON CITY | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

## THIS IS THE ONLY ROUTE

TO THE

## OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

### SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

**Ample time is allowed, at all hours, for meals.**

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

### CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, CHAS. COOK, } Passen Agents.

# CENTRAL RAILROAD

—OF—

## NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:30 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening.

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

# NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:15; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex. 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

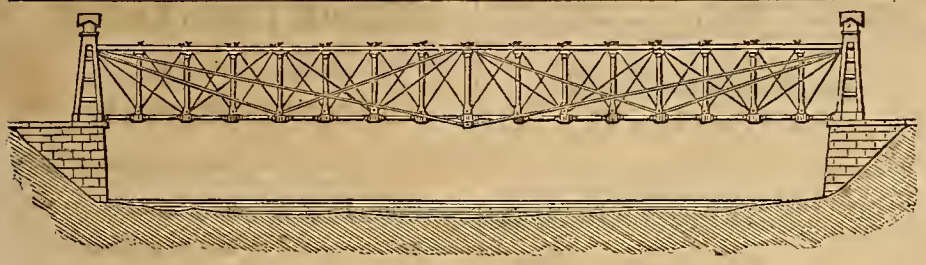
For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



(*Plan of Bridge.*)

FINK'S PATENT

## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

PINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

**SCREW BOLTS,**

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

**M. W. BALDWIN & CO.**

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

**KNOX & SHAIN,**

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

**FINDINGS,**

AND

**MACHINERY,**

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

**BUSH & LOBDELL,**

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

**Chilled Wheels and Tyres**

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

AMERICAN BANK NOTE COMPANY.

***Bank Note Engravers & Printers.***

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

**SUPPLIES,**

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

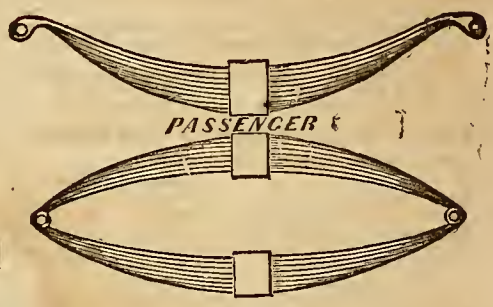
PERKINS, LIVINGSTON & POST.

---

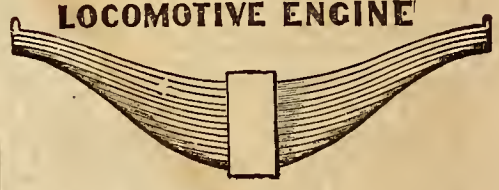
RAILWAY SPRINGS.

**FREIGHT**






**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS.**

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

**Railroad Iron.**

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS, LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

W. M. F. HEWSON,

STOCK BROKER,

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes collo

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by nerw unning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation. Baltimore*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M COLE. *Gen. Ticket Agent. Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Lonisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, aplease apply at the Ticket Office, No. 82 Fourth Street, adjoining the Gazete Office: No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E. FOLLET, General Tick Agent.

W. D. ORISWOLD, General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis. at which place nnites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianspolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train. and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

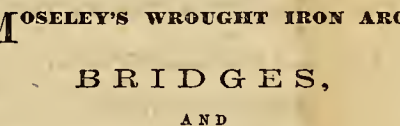
## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

CAR SPRING MANUFACTURER,

Wilmington, Delaware.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works Jnne9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches, for same. &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!



## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M (Express); 2.30 P. M.; 11 30 P M. night.

On Sundays, 4.30 A. M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, JANUARY 25, 1866.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 75 00 |
| " " per month | 25 00 |
| " " six months | 140 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

W. A. MUNSELL,
*General Agent.*


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | *Depart.* | *Arrive.* |
|---|---|---|
| Cincinnati Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4: 0 P. M. | 4:00 A. M. |
| Morrow Accommodation | 5:30 P. M. | 8:00 A. M. |
| Night Express | 7:0 P. M. | 3:50 P M |
| Night Express | 10:00 P M. | 9:40 A. M. |

MARIETTA AND CINCINNATI,

| | | |
|---|---|---|
| Mail | 5:00 A. M. | 7:30 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P. M | 5:45 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Indianapolis & Cambridge City | 7:00 A M. | 9:50 P. M. |
| Toledo and Detroit | 7:0 A. M. | 9:50 P. M |
| Dayton and Sandusky | 7: 0 A. M. | 5:50 P M. |
| Richmond and Chicago | 7:00 A. M. | 9:50 P M |
| Dayton Accommodation | 6:15 P. M. | 9:35 P M |
| Dayton, Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A M. |
| Richmond & Chicago | 5:30 P. M. | 1:0 P. M. |

CHICAGO & GREAT EASTERN.

| | | |
|---|---|---|
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " " | 5:30 P. M. | 1:20 P. M. |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Mail & Springfield Express | 2: 0 P. M. | 4:30 P. M. |
| St Louis and Chicago Express | 7:30 P. M. | 1:10 A. M |
| Lawrenceburg and Harrison Accommodation | 4:30 P M | 8:30 A. M. |
| Harrison Accommodation | 10:15 A M. | 2:20 P. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R.

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M. | 4:35 P. M. |
| Caboose Accommodation | 4:00 P. M. | 8:00 A. M. |

KENTUCKY CENTRAL.

| | | |
|---|---|---|
| Express | 6:0 0 A. M. | 6:30 P M |
| Accommodation | 1:50 P. M. | 11:00 A. M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Morning Express | 9:10 A. M. | 6:30 P. M. |
| Night Express | 0:50 P. M | 30 A M. |

### Present Prospects of Railroads.

In the last month or two, we have seen a rapid falling off in the market price of railroad stocks. In the last year of the war, we saw a more rapid rise in the same stocks. There was some reason for both these changes; but, not one half the cause for it which is imagined. In our opinion, nothing manifests so clearly the speculative character of the whole American stock and money market, as these rapid and causeless changes in the market value of railroad stocks. It shows that the buyers of stocks do not investigate, or care much to investigate what is the real, solid value of stocks. For example, the 6 per cent. gold bonds of the United States Government yield just 8 40 per cent. interest in currency; and it is perfectly certain that, if the currency appreciates till it comes to par, those bonds will still remain at par, if not a premium. In other words, a 6 per cent. gold bond of the Government is a full measure, if not more than a measure of par value. In another form, it is this; that a man of surplus money, for investment, considers *a 6 per cent. net income* all that capital in large masses can command. In fact, it is not worth that in ordinary times. Now apply this test to railroads. In what respect is a really finished, completed railroad, inferior security to that of the Government? In security, it is not; for its obligations are based on the laws of the land, and the road lies on the solid earth. But, there are certain drawbacks and hazards, which make it much more difficult to arrive at the correct and permanent *net income.* 1. There are the annual repairs; but we have supposed only roads which are completed, and of course exclude all of what should be called *construction* expenses In a finished road, a little experience soon determines the annual amount of *repairs* so called. 2 The danger of rival competitors, and this, in some cases has been very great. *New lines* will, of course be made, whenever there is any chance of profit, or of commercial rivalry. But, this is a thing which in a short time settles itself. The first line built in competition which fails to pay a profit, of course ends the matter. These two elements, we consider not very important; they are calculable. But, there is a third element, which people seem to think very important, and base most of their estimates upon; but which the public mind, in our opinion, fails to estimate properly. This is,—3 The *variableness of business.* We observe, that when the business, and therefore, gross receipts of any railroad fall off for two or three months, the market value of its stock soon declines. Now, here is where we think there is much misapprehension of true results. A few months business on any road is no criterion of true rates. The only way in which the apparent business of a road can show the relation of that business to the profits of the road, is by taking the comparative results of several years. But the Stock Exchange seldom looks at this, but rushes to its conclusion by the glance of an eye. It is for this, that we think the prospects of the really good roads, and they are three-fourths of the whole, are much better than the Stock market suppose. Let us look at the elements of the problem. 1. When the war began, the stock of nearly all the railroads were below their real value. We think this is incontrovertible. We can point to roads, which paid 10 per cent. net, and have done so for years, with a surplus behind, which could be got any day for 80 per cent. The public mind had a distrust of railroad stock. At the true test of value, that stock was worth 140. In another year it was above par, and remained so. The effects of the war, we pointed out clearly in the RECORD; that the Southern Roads being cut off, and the transportation of produce to, and through Southern Ports being entirely cut off, it followed, of course, that all the produce which had been carried in that direction must be carried over the Northern Roads, which with the business of the Government would largely increase their business and their profits. This was evident to us, and it so happened: but the public waited till a year or two of heavy receipts brought the fact palpably before the eyes of the Stock Exchange, and railroad stocks rose rapidly and in spite of the enormous investments in Government Stocks, Railroad Stocks, at fair prices, were among the most saleable kinds of property. But, the closing of the war, it was very obvious would produce some reaction. Just so fast as the Southern country was opened up to commerce, some portion of the produce, which would have been carried over Northern lines to Northern ports would, of course, be diverted South, and an equal effect be produced by the cessation of Government business; but this effect has been greatly overrated in the decline of Stocks; because,—1. It is a *fact,* that in a country growing, as rapidly, *the aggregate of all business, and that of railroad business with it, is constantly increasing.* Taking the end of any five years business of almost any railroad, and the *totality* of its business is much greater than it was five years previous: and, this is not going to stop. The growth of the country will be more rapid than ever. 2. A great deal of railroad business which was diverted from the South is permanently diverted. It has found better channels of commerce 3. The structure of the roads has been constantly improving and solidifying, and never will need so large a proportion of repairs hereafter. Here are facts, which make it conclusive that the business of the really good roads *must increase,* not diminish. In view of these facts, we believe, that railroad property never was in so good a condition, and never had so fair prospects as it has now. More than half the

railroads of the United States, if well managed can make 10 per cent. net; and we know roads which are making from 15 to 20 per cent. net profits now. If good investments are wanted for surplus capital, no property in this country offers at this time more advantages than railroad property.

☞ The Cincinnati Chamber of Commerce having passed a resolution requesting their President to appoint a committee to consider and report, at the earliest practical period, *plans*, and the most feasible routes by which to secure the construction of a railroad or roads that will bring our city into direct, speedy communication with the Southern system of railroads, the following gentlemen have been appointed to serve in that important matter. Theo. Cook, Joseph C. Butler, W. H. Clement, Thomas Sherlock, Seth Evans, S. S. L'Hommedieu, Henry C. Lord, Joseph Torrence, R. M. Bishop, W. R. Pearce, Larz Anderson, A. S. Winslow, Lewis Worthington, William Resor, Miles Greenwood.

From the N. Y. Tribune.

**Omaha and the Pacific Railroad.**

HERNDON HOUSE,
OMAHA, N. T., Jan. 10, 1866.

As a stranger in the West, I have been much interested in the long journey from New England to this Western or central city of the continent, and now give you my impressions of this embyro Chicago, and surrounding country.

OMAHA is finely situated on the west bank of the Missouri River, and as a site for a great city cannot be surpassed. The thousands of acres of bottom lands on the banks of the river—perfectly level—give an excellent opportunity for the erection of depot buildings, wharves, warehouses, &c.; and the bluffs, rising with a gentle ascent to the table land on the plateau above, extends with a beautiful rolling prairie for twenty miles from the river, comprising as good soil, from three to six feet, as can be found in the world; and beyond this the beautiful Platte Valley, a region of country which it would take a volume to describe, which is a continent in itself, unsurpassed in the world for agricultural purposes, and is being fast settled by the hardy emigrants who seek a frontier life. The soil produces in the greatest abundance with very little labor when once the ground is broken. Grapes grow spontaneously, and can be easily and profitably cultivated, and it has been demonstrated that the finest fruit, such as apples and pears, can be made to produce in the greatest profusion, and of the very best quality. Vegetables of all kinds are produced in the greatest abundance, miles of corn fields meet the eye, and the best of wheat is grown. The greatest lack is timber, but even this want is being supplied, from the fact that much more is found in the country than was at first supposed. As soon as the projected railroads are completed coal can be brought here very nearly if not quite as cheap as it can be to Philadelphia; and besides, such is the amazing fertility of the soil that trees from the seed—the cotton wood and locust—can be produced in five or six years for fuel, at a much cheaper rate than timber lands in the East can be cleared and prepared for the plow I do not think that there is any State or Territory which is better adapted to the wants of the emigrant, of all classes, than this.—Mechanical labor is in great demand. Carpenters, brickmakers, masons, tailors, and in fact all the trades, together with laborers of all descriptions can find plenty of employment at remunerative prices.

For the farmer there is no place with better prospects in the world. The great drawback in the West in agricultural pursuits is the want of a ready market for the products of the soil, but here all that can be raised is sold immediately, and at prices for most articles higher than in the East. The market for Omaha and surrounding country is *West.*—There are already in the mining districts 500,000 settlers, and there would be many more if they could subsist there, who draw their supplies from this direction. Capt. Hooper of the steamer Colorado, who has long been engaged in freighting on the river, informs me that Illinois alone supplies this point with at least 1,000,000 bushels of grain annually, which is brought across the State of Missouri from St. Joseph, or up the river from St. Louis, and to different points along the river. His line alone brought 500,000 bushels last year. Now it is very apparent that taking into account the great cost of transportation, that grain could be raised much cheaper here, and also that this would be the great producing country, that is, together with the Platte Valley, to supply the mountainous and mining districts of the North-West. Colorado, Dakota, Montana, Utah and Idaho must, at least for many years be dependent upon this, section for supplies. No intelligent farmer could come out here and not grow rich. There is one branch of agriculture which I almost forgot to mention, that of the grasses. They are a mine of wealth here. E Creighton, Esq., President of the National Bank, showed me an island on which he kept 1,700 cattle, and on these boundless prairies hundreds of thousands may be fed and fattened with only the expense of herding. Fortunes are made in this business.

PACIFIC RAILROAD.

This magnificent enterprise is being pushed forward with resistless energy. The Vice President and manager of the road, T. C. Durand, Esq., is at present here, and his presence gives a powerful impetus to the work. He sees no obstacles, fears no difficulties, laughs at impossibilities, and seems thoroughly to understand every portion of the work not on general principles but in detail, attending to the smallest matters as well as to the weightier ones, and is, with this Winter weather, pushing the road at the rate of half a mile per day, and in June will have the engines running on 100 miles of road west of the Missouri River, and in one year it will extend to Fort Kearney.

Col. Silas Seymour of your city is also here as consulting engineer of the road, and with his prestige,—never having been connected with an enterprise which proved a failure—his name is a host in itself. The commissioners appointed by the President to examine the road have just left, and expressed themselves as being not only satisfied but delighted with the manner in which the work has been accomplished, which more than meets the demands of the Government. Nothing strikes one with more surprise than the

BUILDINGS OF THE COMPANY.

They are of brick, and for symmetry, utility and elegance, have no superiors in the country, and only a few equals. They comprise the machine shops, car buildings, blacksmith shops, &c., and are intended to be of sufficient capacity for 30 miles of the road.—They remind one almost of a creation, as, indeed, all this work does. Last Spring, not a brick here, no lumber, no material—all had to be manufactured, or transported either up the river from St. Joseph or St. Louis, or brought across the country by mule trains.—Now 20 saw-mills are at work, and all the lumber required for building purposes or crossties is being rapidly prepared; and since the 16th of September, 1,000,000 bricks have been laid, and other work in proportion.

The commission, consisting of Col. J. H. Simpson, President of the Board; Major-Gen. S. R. Curtis, and Major Wm. M White of N. Haven, Conn., on Saturday went slowly and critically over the road, examining its construction, the bridges, culverts, &c., and as the telegraph has told the world, reported favorably There was a very pleasant party of gentlemen with them, including T C. Durand, Vice-President; W. F. Durand, General Superintendent; Col. Silas Seymour, Consulting Engineer; Gov. Lowndes, Geo. Francis Train, and other distinguished gentlemen.

The road was completed 45 miles, and at the close of the examination, and end of the line, a collation was served in the elegant passenger car, which was constructed here. Songs, sentiments, and speeches from the distinguished gentlemen present were the order of the day, and all were delighted not only with the successful completion of the work, but at the thought that they occupied the first passenger car on the world's highway that had been so near the Rocky Mountains. The fine new engine which drew out the party was the Major-Gen. Sherman, and we took it to be significient of the fact that the raid of the iron horse is soon to reach successfully the Western Ocean.

ENGLISH STOCK COMPANIES ORGANIZED IN 1865.—During the year 1865, (says the *London Mining Journal* of January 6,) 287 new companies have been introduced, with an aggregate proposed capital of £106,995,000. They may be thus analyzed:

| Companies. | No. | Capital authorized. | Capital offered. | Deposit. |
|---|---|---|---|---|
| Manufacturing and trading.. | 119 | £28,737,000 | £22,207,900 | £3,890,290 |
| Banking ..... | 11 | 15,200,000 | 10,400,000 | 1,465,600 |
| Railways..... | 13 | 12,720,000 | 8,140,000 | 1,180,960 |
| Financial and discount .... | 9 | 12,200,000 | 9,070,000 | 1,095,000 |
| Building and investment.... | 32 | 9,815,000 | 7,350,000 | 1,186,950 |
| Assurance..... | 7 | 9,950,000 | 3,060,000 | 395,000 |
| Shipping ..... | 15 | 6,170,000 | 4,235,000 | 729,100 |
| Mining. ..... | 49 | 4,505,000 | 4,195,000 | 1,038,000 |
| Gas ..... | 5 | 1,950,000 | 1,725,000 | 370,000 |
| Hotels ..... | 12 | 1,300,000 | 1,250,000 | 264,500 |
| Miscellaneous... | 15 | 5,175,000 | 3,975,000 | 560,750 |
| Total..... | 287 | £ 06,995,000 | £75,573,900 | £12 174,790 |

It will be seen that, notwithstanding the number of railroads in operation in England, *thirteen* new companies were "introduced" in 1865. Also, *forty-nine* new mining companies. And that of the "capital offered" $377,894,500, the amount "deposited" was $60,872,500, or *sixteen per cent.* of the amount "offered!"

As subscriptions are almost universally paid in by instalments, distributed in some cases, especially in railways, through several years of time, the new subscriptions made in 1865 were obviously a very large per centage of the whole amount offered.—*Mining Reg.*

## Construction of Blast Furnaces—Manufacture of Pig Iron.

BY JAMES GEORGE BECKTON.

Within the last ten years, the blast furnaces which have been erected in the Cleveland district have been gradually increased in size, both in diameter and height; and these alterations have thus far been attended with good results, so much so, that almost all the new furnaces, now in course of erection, are being built with boshes, ranging from 16 feet to 22½ feet in diameter, and from 60 feet to 75 feet in height, from the bottom of the hearth to the filling plates at the top. Previously the furnaces ranged from 13 feet to 15 feet diameter at the boshes, and from 45 feet to 50 feet in height, the extreme increase being about 70 per cent in both dimensions. The maximum diameter of the boshes appears not yet to have been attained; and the limit to the height will apparently be found in the strength of the coke to support the crushing force of the high column of materials in the large blast furnace. The make of pig iron has increased at the same time from 200 tons per week in the small furnaces to 300 tons in the large furnaces.

The average quality of materials used in the production of one ton of pig iron in the large furnaces is as follows:

| | | |
|---|---|---|
| 26 | cwt. | of Durham coke, |
| 70 | " | Cleveland ironstone, |
| 15 | " | of limestone, |
| 10 | " | of coal for boilers, hot-blast stoves, and calcining kilns, |
| 121 | " | total, |

or about 6 tons of materials per ton of iron made. Formerly the quantity of coke used, per ton of iron made, averaged 35 cwt., instead of 26 cwt, and the quantity of coal 20 cwt., instead of 10 cwt. The writer does not attribute the whole of the saving of fuel which has taken place to the increased size of the furnaces alone, as there are several other improvements which have combined to produce an economy of fuel in the manufacture of pig iron in the Cleveland district, of which the following are some of the principal:

First. — The more efficient management which has taken place at the different works.

Second.—The better adaptation of engine power and hot-blast stoves to the requirements of the furnaces.

Third.—The improved system of calcining the ore, which was formerly carried on by clamping in the open air, but is now performed in properly constructed calcining kilns.

Fourth.—The higher degree of temperature of the blast supplied to the furnaces, which was formerly heated in the hot-blast stoves to only 600° or 700° Fahr., but is now very generally being supplied to the furnaces at a temperature of from 800° to 900°.

Fifth.—The plan of taking off the waste gas from the furnaces and burning it at the boilers and hot-blast stoves, in place of using additional coal for this purpose.

The application of the waste gas to the boilers and hot blast stoves is becoming very general at the different works in the district, and arrangements are now being made at several of the new works in course of erection for applying it to the calcining kilns, for the purpose of calcining the ironstone. The plan in general use for taking off the gas from the blast furnace is the closed furnace top with bell and hopper, sufficiently large to charge from 8 to 10 tons of materials into the furnace at once, and with an arrangement for raising and lowering the bell by hand. The impression seems to be gaining ground that taking off the gas with the closed top, and in connection with a large chimney double the height of the furnaces, does not interfere with the operations of the large furnace, either as regards economy of fuel or quality and make of iron.

A noticeable feature in the large furnaces is the greater amount of time the materials are allowed to remain in the furnace. The capacity of the Thornaby furnaces, with 20 feet boshes and 60 feet height, is 12,361 cubic feet; the area of the boshes is 314 square feet, and the make of iron 300 tons weekly per furnace. The capacity of the small furnaces which were formerly erected, with 14 feet boshes and 50 feet height, is 5,553 cubic feet; the area of the boshes is 154 square feet, and the make of iron 200 tons weekly per furnace. In the large furnace, there are more than twice the quantity of materials undergoing the process of heating, and also remaining a longer time in the furnace. Moreover, the area of the boshes in the large furnace being double that in the small furnace, while the quantity of iron produced by the large furnace and, consequently, the quantity of blast supplied is only one and a half times as much as in the small furnace, it follows that the ascending gases pass through the materials at a slower velocity and at a lower temperature in the large furnace. This allows the coke to descend to the zone of fusion without losing so much of its carbon in the formation of carbonic oxide, as previously in the small furnace; and hence arises the greater economy of fuel in the large furnace. To produce 300 tons of pig iron per week, the large furnace requires to be supplied with 8,000 cubic feet of blast per minute, at a pressure of 3 lbs. per square inch.

Four furnaces at the Ormesby Iron Works, Middlesborough, belonging to Messrs. Cochrane erected in 1855, were the largest in the district at that time: the boshes are 16 feet diameter, and the height is 56½ feet. The furnaces are constructed upon land consisting of mud and silt, and piling had therefore to be resorted to, in order to secure a good foundation for the furnaces. A bed of concrete was placed on the top of the piles, and six inverted arches were turned on the top of the concrete and the brick pillars carried up, and strong cast iron bearers fixed across the top, for carrying and binding the brick-work of the barrel and boshes. The outer shell is bound with wrought iron hoops, fixed near enough together to prevent the barrel from cracking. The boshes are at an angle of 75° from the horizontal.

In building four furnaces, in 1858, at the Jarrow Iron Works, Newcastle-on-Tyne, a good strong clay was found for the foundations to rest upon; the brick-work was carried up to the floor line, then twelve cast iron columns were erected, and wrought iron casings fixed on the top of them. The casings extend from the top of the five tuyere houses to the top of the boshes, above which the barrel is bound with wrought iron hoops supported by T irons, the latter being carried up to the top, and a flat ring riveted to them sufficiently strong to carry the floor plates. The boshes are 18 feet diameter, at an angle of 66° from the horizontal, and the furnaces are 60 feet high.

At the Normanby Iron Works, Middlesborough, belonging to Messrs. Jones, Dunning & Co., three furnaces were erected in 1860, upon a bed of concrete on clay of a weak nature; they are supported on brick pillars, and hooped similarly to the Ormesby furnaces. The boshes are 18 feet diameter, at an angle of 72° from the horizontal, and the furnaces are 58 feet high.

At the Thornaby Iron Works, South Stockton-on-Tees, belonging to Messrs. Whitwell, three furnaces were erected in 1862 upon piles, in consequence of the land being mud and silt; they stand each upon 12 cast iron columns, and are cased with iron, similarly to the Jarrow furnaces. The boshes are 20 feet diameter at an angle of 68° from the horizontal, and the furnaces are 60 feet high.

At the Ackham Iron Works, Middlesborough, by Messrs. Stevenson, Wilson, Jaques & Co., three furnaces are being built on piles, in consequence of the land being mud and silt, and are each supported by 12 cast iron pillars. The brick-work around the boshes is cased with plates, and from the boshes up to the top the barrel is bound with hoops and T irons. The boshes are 22½ feet diameter, at an angle of 68° from the horizontal, and the furnaces are 70 feet high. These furnaces the writer believes to be the largest in dimensions that have ever been erected, and their contents will amount to no less than 1,250 tons of material per furnace. They are expected to produce each 350 tons of pig iron per week.

Mr. D. Adamson regretted that Mr. Beckton was unexpectedly prevented from being present at the meeting. With some of the blast furnaces in the Cleveland district he had himself had an opportunity of becoming acquainted; and in reference to the semi-closed plan of furnace top, for taking off a portion of the gas from the furnace throat, as used at the Thornaby furnaces, the construction of top in this case was similar to that in use at Messrs. Schneider's furnaces near Ulverstone; but although at the Ulverstone furnaces it had been found to work so successfully that the same plan was being adopted for more furnaces at the same works, in the particular instance of the Thornaby furnaces it had not been found to answer. The centre tube or brick chimney for taking off the gas was carried upon six arches springing from the inside of the furnace throat, and the charging of the materials into the furnaces was done through the spaces left between the arches; and the reason of the failure of the plan at the Thornaby furnaces was that constant trouble was occasioned by the damage done to these arches in charging, owing to the large size of the material in the charges. The Cleveland ironstone was raised from the mines and supplied to the furnaces in very large pieces, and would not pay for being broken to a smaller size, on account of its friable nature, and the quantity of waste that would be made in breaking it up; and in charging the furnace with these large pieces, they broke down the arches carrying the centre tube, so that this plan had now been abandoned at the Thornaby furnaces, and they were about to have closed tops put on, of the usual construction, for taking off the whole of the gas.

Independently, however, of the trouble arising with the arches in the semi-closed plan of furnace top, it was also found at the Thornaby furnaces that the portion of the gas so taken off was not sufficient in quantity for the purposes of raising steam at the works and heating the blast, even without attempting to use any of the gas for calcining the

iron. In the discussion of this subject at the Liverpool meeting, he had urged the desirability of taking off the whole of the gas from a furnace, on account of the large additional heating power then at command; and this view appeared to be confirmed by the experience in the present instance at Thornaby, and by the statement given in the paper just read, that at some of the Cleveland furnaces where the top was entirely closed, the gas was likely to be employed for calcining the ironstone in addition to heating the steam boilers and the hot blast stoves.

The President inquired what was the effect of the increased size of the Cleveland blast furnaces upon the quality of the iron made.

Mr. D. Adamson understood that in the large furnaces, foundry iron was made with rather less trouble than in the smaller ones, and with considerable less fuel, according to the statement in the paper. The charge was thus lighter, and the iron was made at less cost in the larger furnaces, which was attributed in the paper to the greater length of time that the materials remained in the larger furnaces.

The President asked what size of blowing engine was used for the large furnace at the Acklam Iron Works.

Mr. D. Adamson was not aware what size of engine was used at the Acklam furnaces, but the majority of the Cleveland furnaces were supplied with blast by a number of small blowing engines, and the rest by a single large engine. With regard to the pressure of the blast, he believed that 3 lbs. per square inch, or rather less, was usually about the pressure at the engine in the Cleveland district, but he doubted whether the full pressure of the blast was always obtained in the furnaces, as it had been found by applying gauges on the tuyeres at the Thornaby furnaces, that the pressure at that point was considerably below what it was at the engine. At the Norton furnaces of Messrs. Warners, near Stockton-on Tees, the pressure originally employed of 3½ lbs. per square inch had now been reduced to only ½ lb. per square inch; and he understood the lighter blast was prefered at those furnaces, and that a greater quantity of foundry iron was made than with a heavier pressure of blast.

The President inquired what was the usual number of tuyeres in the Cleveland furnaces.

Mr. D. Adamson replied that from three to six tuyeres were usually employed. At the Norton furnaces three large tuyeres were now used with the light blast, instead of six smaller tuyeres employed previously with the heavier blast: and from the reduction in the pressure of the blast, much less engine power was now required in blowing the furnaces for the same make of iron. At another furnace, however, in the neighborhood, the engines had been kept loaded to 2¾ lbs. per square inch pressure, while the pressure of the blast was reduced by throttling its passage through the main by means of a stop valve; and in that instance, consequently, the full benefit of saving in engine power by working with a lighter blast had not been realized.

Mr. G. Thompson observed that the size of the blast furnace was a very important subject to iron makers, and one upon which experience differed a good deal; and it was therefore highly desirable to get all the information possible, in order to make a fair comparison between different sizes of furnace. One point to be inquired into was the relative quantity of iron produced and of blast supplied in the large and small furnaces. In the large furnaces, 60 feet high, and 20 feet diameter boshes, making 300 tons of iron per week, the quantity of blast had been stated in the paper to be 8,000 cubic feet per minute; and he inquired what was the quantity of blast supplied to the smaller furnaces, 50 feet high, and 14 feet diameter of boshes, making 200 tons of iron per week.

Mr. Neil Robson did not know the quantity of blast supplied in the smaller Cleveland furnaces, but in the blast furnaces of the Glasgow district the quantity of blast supplied to a furnace about 50 feet high and 16 feet diameter of boshes, was usually supposed to be about 6,000 cubic feet per minute.

Mr. C. Cochrane thought the 8,000 cubic feet of blast per minute, which had been stated to be the supply to the large Cleveland furnaces, must be the theoretical quantity measured by the total displacement at the blast engine, without any allowance being made for escape between the piston and the cylinder and for leakages in the blast main; for the quantity of coke consumed in the furnace—26 cwt. per ton of iron made—would not require, he thought, more than 6,000 to 6,300 cubic feet of blast per minute, and he could not understand, therefore, so much as 8,000 cubic feet per minute being supplied to the furnace.

Mr. G. Thomson remarked that 6,000 cubic feet of blast per minute would be a maximum quantity in Staffordshire, and there were many furnaces of a smaller size in that district in which a much smaller quantity of blast was supplied.

Another point upon which further information was required in connection with the Cleveland blast furnaces was the temperature of the blast in the large and small furnaces, and whether the large furnaces had been worked with the lower temperature of blast used in the smaller ones It appeared from the paper that the blast for the larger furnaces was heated to 800° Fahr., while in the smaller furnaces the temperature had not been carried beyond 600°; and in order that a fair comparison might be arrived at between the different sizes of furnace, he should be glad to know the result of working the larger furnaces at the lower temperature of 600°, the same as the small furnaces, since the conditions of working should be made as nearly as possible the same in the different furnaces. The actual temperature of the blast, he believed, was generally much higher than was indicated by the ordinary rough test of holding a strip of lead in the blast to be melted by the heat; since, in order to melt the lead at all under such circumstances, the temperature of the blast must be considerably above the melting point of the metal, and the real temperature was, therefore, not ascertained with any approach to accuracy by the plan of melting metals in the blast. He inquired how the heat of the blast was ascertained when it was much above the melting point of lead, and whether any pyrometer was employed for showing the temperature accurately.

Mr. C. Cochrane replied, that for temperatures above that indicated by the melting of lead in the blast, a strip of zinc was used as the test instead of lead, and by that means a temperature as high as about 850° was indicated, the melting point of zinc being 770° Fahr.; for the actual temperature of the blast, when hot enough to melt either lead or zinc, was found to be as much as 80° or 90° above the melting point of the metal. This was ascertained to be the case, as a general rule, whatever the melting point of the metal employed, as was shown by the aid of the improved pyrometer constructed on the principle of measuring the temperature of a copper ball heated in the blast by immersing it in a vessel of water, which afforded the means of measuring with the greatest accuracy the highest temperatures that were likely to be met with in practice.

Mr. E. A. Cowper explained that the pyrometer referred to was an improved arrangement of that invented by Mr. John Wilson, and described at a former meeting of the institution, and was a very simple and accurate contrivance for measuring high temperature. It consisted of a copper vessel holding exactly a pint of water, and a small cylindrical piece of copper made of such a size that its total capacity for heat should be 1-50th that of the pint of water; this copper piece was held for a sufficient time in the current of heated blast until it had acquired the full temperature of the blast, and it was then dropped into the vessel of water, when each 50° that the temperature of the copper had been raised produced a rise of 1° in the temperature of the water; and thus the real temperature was at once read off from a thermometer inserted into the water, having a properly divided scale showing 50° for each 1° of the ordinary scale. It was by this means that it had been ascertained that, when the heat of the blast was tested by a stick of metal being just melted on exposure to the current, the actual heat of the blast was about 70° to 90° Fahr. above the melting point of the metal. Thus, if lead melting at 620° were just melted by the blast, the heat of the blast might be taken to be about 690°; zinc melted at 770°, and would show about 840°; the antimony did not melt at less than 830° and its melting would, therefore, indicate about 900°. Of course, if the stick of metal were melted quickly in the blast, it showed that the temperature was much higher than the melting point of the metal; and ordinarily the sticks of antimony of about 5-16ths inch diameter became fused in three or four seconds by exposure to the heated blast from the regenerated hot-blast stoves.

Mr. Neil Robson observed there could be no doubt as to the importance of the question of the height of blast furnaces; and it appeared from the paper a height of 70 feet had now been reached in the Cleveland district, while in the neighborhood of Glasgow, the highest furnace was only 55 feet, and generally the furnaces were not more than 42 feet high. At the Ardeer Iron Works, in Ayrshire, where there were four furnaces, each 52 feet high and 16 feet diameter at the boshes, the regular make of iron was 1,000 tons per week, or an average of 250 tons per week from each furnace. Occasionally, one or two of the furnaces would make 270 tons per week, while the others would make less than 250 tons at the same time; but 1,000 tons per week was the regular average make throughout the year, taking all four together. The highest make in the Cleveland district was stated at about 300 tons per week, with 60 feet height and 20 feet diameter of boshes; but, in comparison with the Scotch furnaces, the make of the larger Cleveland furnaces ought to be as much as 400 tons per week for the size of furnace used. The temperature of blast employed was in both cases from 800° to 900°, and the pressure about 3 lbs. per square inch. Hence, he thought, the cause of the smaller produce of the large Cleveland furnaces was to be sought in the materials that had to be worked, the nature of the ironstone to be smelted, and the quality of the fuel to be used. In the Ardeer furnaces the ore employed was, in a great measure, the blackband ironstone

and the fuel was raw coal; and he presumed these must be easier smelted than the materials in the Cleveland district, since the Scotch furnaces, though so much smaller, produced nearly as much iron in the same time.—*Newton's Lond. Jour. Arts, Aug.*, 1865.

### The Pacific Railroad West.

S. B. Reed, Chief of Engineers of the Pacific Division of the Union Pacific Railway, and party, numbering thirteen persons, returned on Friday from their exploring trip to the Humboldt. That division of the line comprises the intervening space between the summit of the Rocky Mountains and the eastern boundary of California, the Pacific Railway Company building the road eastward to the last named point. Reed and party left here August 1st, to run a preliminary line hence to the Humboldt Valley. Commencing at the northwest corner of the city, they ran westward to and between Black Rock and the Salt Lake, through Tooele Valley, three miles north of Grantsville, round the northeast point of the mountain range into Skull Valley, and over the Cedar Mountains. Two lines were here run to the desert—one by way of Granite Mountains to Redding's Springs, near the north end of the Go-shute Mountains; the other through a pass further north to the desert, which the party could not prosecute further owing to absence of water. They therefore moved around by and from Redding's Springs to the west side of the desert, and ran three lines over the Humboldt Mountains—a high and rugged range. The south line was run from the mail station in Ruby Valley through Hasting's Pass; the middle one from the north end of Ruby Valley through the Humboldt Pass; and the north line from near the junction of the forks of the Humboldt eastward through an easy pass into Clover Valley, thence to the desert to meet the line from the desert to the east, and discontinued through the difficulty of obtaining water. The northern line is the most direct, and Reed thinks it the most practicable, the other passes through the Humboldt range presenting considerable difficulties. By the northern line, about 220 miles would carry the rails from this city into the Humboldt Valley, with no heavy work, and grades of not more than sixty feet to the mile through the Cedar Mountains, and forty to the mile through Humboldt range. The party, like all explorers in that region, had occasional hard times for water. One night, on the west side of the desert, they traveled twenty-two miles after finishing their day's work, and then were obliged to camp without water. Next morning, eight miles further, they found the much needed liquid. Reed would have continued his line down the Humboldt Valley had he been properly provided for such an extension of the expedition, but on account of insufficiency of supplies he was obliged to return to this city upon reaching the Humboldt river.—*Salt Lake Telegraph.*

### Cincinnati Water-Works.

The following is an abstract of the annual report of the officers of the City Water-works for the year 1865:

FINANCIAL.

The books of the Secretary, which have been carefully examined and audited, present the following exhibit for the year ending Jan. 1, 1866:

| | |
|---|---|
| Receipts from all sources | $289,857 92 |
| Deduct overdraft, Dec. 31, 1864 | 2,980 94 |
| Leaving a working capital of | $286,876 98 |
| The total amount of orders drawn on the Treasury were | 299,867 81 |
| From which deduct overdraft Nov. 23, 1865 | 13,558 45 |
| Making total amount paid | $286,309 37 |
| Leaving balance in Treasury Jan. 1, 1866 | 567 61 |

The order drawn on November 23, 1865, and cash paid for the same time, amounting to $22,530 31, was appropriated for 1,206 feet of 35-inch pipe, made under the existing contract with T. J. Gaylord & Co., to complete the 35-inch line of pipe on Eighth street, from Broadway west to Central avenue, and is chargeable to the works of 1866.

EXTENSION OF NEW MAIN AND DISTRIBUTING PIPE.

The extension of new main and distributing lines during the year has been unusually large, in consequence of the rapid growth of the city or territory which could be reached by the elevation of the old reservoir, thereby making a necessity to enlarge the mains, in order to fully supply the distributing lines at the remote parts of the city. The 35-inch line, commenced last year, connects at Broadway and Eighth street with the 40-inch line, arriving direct from the reservoir, and continues along and on Eighth street to a point between Race and Elm streets, there, for the present, connecting with the 20 inch line, running west to Central avenue.

The earliest opportunity, in the coming season, will be embraced to commence operations at that point, viz: where the 35 and 20-inch connect, and remove the 20-inch, and put down in its place the 35-inch, already provided for that purpose, and make the final connection at Central avenue with the 20 inch line.

The distributing line has been extended along the Harrison Pike from the terminus of the old line at Western avenue, running east across Mill-creek to Lick Run, a distance of 3,415 feet. Considerable delay was occasioned in passing through the bed of Mill creek, in consequence of quicksand, and the treacherous character of the embankment on both sides of the creek.

ENGINEER'S REPORT.

From the report of the engineer in charge of the works, it will be seen that 2,050,198,269 gallons of water have been pumped into the reservoir during the past year, an excess of 46,990,350 over the number in 1864. For this the works have received $263,632 92, or at fifteen cents per thousand gallons, pay for 1,757,552,800 U. S. gallons, leaving a balance not paid for and chargeable to the fire department, public building, fountains, &c., and a waste of 292,645,469 gallons, an excess of waste of 50,010,550 over the previous year. This excess is attributable to the numerous leaks occasioned by the breaking of the numerous distributing pipes. By the report of the engineer it will be seen that the amount of water pumped into the reservoir during the year gives us a daily average consumption of 5,616,781 U. S. gallons, showing an excess of daily consumption greater than the capacity of the present reservoir 616,981 gallons. This fully accounts for the immense deposit in the pipes, and clearly proves that our citizens have received the water of the Ohio River in all its peculiar freshness. It is therefore a matter of congratulation that the construction of the new aqueduct, which supplies the new engine, will in a great measure relieve the works of this difficulty until the new reservoir is completed.

It is to be regretted that a large number of our citizens—water consumers—can not or will not comprehend that permitting leaks to remain without repair, thereby creating a useless waste of water, only but adds to the general expenses, for which they in turn pay their proportion. While we encourage a very liberal use of water, as conducive to cleanliness and health, they should as promptly correct any abuse, whether from leaks or otherwise, in justice to that class of our population who, from force of circumstances, can not avail themselves of those domestic conveniences, but are nevertheless called to pay their proportion of the waste occasioned by their more fortunate neighbors.

The Superintendent discusses at great length, the subject of a new reservoir in the Garden of Eden, but this we deem unnecessary to publish, the argument having appeared in full in the daily papers.

HYDRAULIC ENGINEER'S REPORT.

Mr. Henry Earnshaw, Hydraulic Engineer, makes the following report of meteorological observations for the year:

Board of Trustees of City Water-works:

In accordance with your instructions, observations on the range of the thermometer and barometer have been taken at this office at eight, twelve and five o'clock each day during the year. Accurate guaging of the amount of rain and melted snow falling in the same time was also taken.

The result of these observations will be found as follows:

1865. THERMOMETER.

| | |
|---|---|
| July 4, maximum hight | 94° |
| Jan. 28, minimum hight | 6° |
| Mean temperature | 57½° |

BAROMETER.

| | |
|---|---|
| January 30, maximum hight | 29.93 |
| March 21, minimum hight | 28.72 |

On this day there was a storm of hail, rain, and thunder.

The largest amount of rain falling at one time, was on May 25, equaling 2.150 inches.

The number of days on which the fall of rain was more than one inch were thirteen; over one-half and less than one inch, twenty-four, and less than one-half inch, fifty-seven days.

The fall of rain in each month during the year will be found in the following table:

| | Rain. | Melted Snow. |
|---|---|---|
| January | 1.358 | 1.900 |
| February | 2 205 | .439 |
| March | 5.377 | ..... |
| April | 6 802 | ..... |
| May | 9 057 | ..... |
| June | 2 160 | ..... |
| July | 8.536 | ..... |
| August | 2.206 | ..... |
| September | 7.391 | ..... |
| October | .782 | ..... |
| November | .352 | ..... |
| December | 4.252 | ..... |
| Total | 50.480 | 2 339 |

It will he seen that the total amount of rain and melted snow during the year equals nearly fifty three inches; a larger quantity by far than has fallen for many years. In the month of July, from the 19th to the 26th, inclusive, the rain fall was nearly six and a half inches.

Several other reports were presented, but as no especial importance is attached to them, we do not consider it necessary to publish them.

From the National Intelligencer.

### A Shorter Railroad Line to the West.

In speaking yesterday of the railroad system of Upper Virginia, we did not much expatiate upon the short route to the West which would be afforded by the extension of the Loudoun and Hampshire Road to Harper's Ferry. The Directory of the Winchester Road propose to connect theirs with the Loudoun and Hampshire at the Ferry, and thus obtain communication with Alexandria at Washington. To do this they would have to cross the Shenandoah near Harper's Ferry, and come down the Southside of the Potomac, apparently as far as Point of Rocks, from which point a railroad could be easily constructed to Leesburg. To build by a more direct route would, it appears to us, require the crossing of the Catoctin mountain range. But whichever of the routes should be adopted a much shorter line to the West will be given us than the present one by the Baltimore and Ohio line. The traveler leaving Washington would go toward Alexandria, near to a point some four miles South called 'Four-mile Run," and thence diverging North and West, would reach the Point of Rocks, *via* Leesburg, in something like two hours sooner than by the Baltimore and Ohio Road. There is perhaps fifty miles advantage in distance, by the Loudoun and Hampshire Road, over the Baltimore & Ohio, but the greater advantage lies in the fact of the level grade, by which great speed of the trains would be secured at comparatively small expense. Leaving Washington by the Baltimore & Ohio line, on reaching the Relay House, there succeeds a tedious up grade for a long distance.

We learn from Colonel Stewart, of the Washington and Alexandria Road, that the control of the Loudoun and Hampshire Road is in the Washington and Alexandria Company, which company anticipates the procuration of authority, from the Virginia Legislature, to extend the Loudoun and Hampshire to Harper's Ferry, to connect with the Winchester Road. We most heartily extend our best wishes to Col Stewart and his *confreres* in their effort.

From the Memphis Commercial.

### Important Railroad Movement.

The people of North Alabama and North Mississipoi recently met in convention in the town of Inka, for the purpose of taking into consideration the propriety of building a railroad from that place to the Tennessee river. The meeting was a very harmonious one, and resulted in the unanimous adoption of the following resolutions:

*Resolved*, That the citizens of Tishomingo county, in convention, fully sensible of the many and lasting advantages which would accrue to this community, the great valley of the Tennessee, an extensive fertile plateau spreading out to the south of us for many miles, as well as to the numerous commercial towns and cities of the Ohio and Mississippi Rivers, would earnestly call the attention of those who are to become the beneficiaries of such a road to the fact, and urge upon them the necessity and propriety of its immediate completion.

*Resolved*, That we are fully convinced of the feasibility of constructing said road, and probably at a cost not exceeding one hundred and fifty thousand dollars.

*Resolved*, That we are convinced that the completion of this road will forever relieve us from the inconveniences and delays growing out of the many obstructions on the Tennessee river, and secure to us a prompt and certain transportation for our products to Paducah, Evansville, Cairo, St. Louis and Louisville, and the same sure transportation for their commodities into our vast and rich region of country.

*Resolved*, That the President appoint a committee of three to present a copy of these resolutions to the President of the Memphis & Charleston Railroad, and ask his co-operation in our enterprise.

*Resolved*, That a competent agent be dispatched to all the cities above named, to represent the claims of this road to the consideration of their citizens, and to solicit subscriptions to the same.

### Wrought Steel.

Though not a new article, seem to be in a fair way to be generally applied to a new purpose, to wit: the manufacture of railway tires, axles, &c.. The Trenton Iron Company professes to have discovered a process of manufacture by which inequalities in tires manufactured from this important article are rendered absolutely impossible, and by which they can be produced at a cost no greater than those manufactured from the best charcoal iron, while over such iron, it is claimed, wrought steel has far greater tenacity and density. It is not so hard as cast steel, and, therefore, gives the tires great adhesion, and renders them altogether less liable to break in frosty weather. A set of these tires has been on trial on the Long Island Railroad about six months, and the result is every way favorable. The encouragement which the company has received is sufficient to warrant the company in engaging in the manufacture of wrought steel railway tires on an extensive scale, and with this view they have erected rolling machinery of the most powerful character, enabling them to work the tires from large piles, so that each fibre of the tire is continuous throughout its entire length.

The value of this feature is apparent from the wearing surfaces of the set in use on the Long Island Railroad. It is stated that there is not the slightest appearance of lamination or abrasion, or of soft or hard spots, and the surfaces are as bright as cast steel, from which it seems to differ only in being somewhat softer, and therefore, as we have before remarked, giving more adhesion and less liability to fracture. The President of the Long Island Railroad Company, after giving them a fair trial, states that the trial warrants him in saying that he shall give them the preference over Lowmoor or Bowling. Inasmuch as we import English tires to the extent of about $5,000,000 annually, this is important, and it would not be strange if the wrought steel tires manufactured by the Trenton company should work a revolution in this respect. The company solicit orders from railway companies for sample sets; and it is to be hoped that every company will afford them a fair trial.—*New York Commercial List.*

### Invention in Railway Carriage Transit.

Mr, John Routledge, carriage department manager of the West Hartlepool Harbor and Railway, has effected an improvement in railway passenger traffic, in rounding extreme curves in the railway line itself, that cannot fail to prove highly useful and beneficial to the traveling public, inasmuch as some of the immediate results of the improvement will be to insure perfect safety, with long carriages, at a high rate of conveyance, and of preventing what is scientifically known as the crease of the tyre and the side of the rail. By the adoption of Mr. Routledge's invention fully 24 per cent of the friction now endured will be removed, and there will be at the same time obtained an acceleration of speed to between 25 and 30 per cent over ordinary carriages with the same amount of steam power. It consists in a principle of action, well illustrated in the construction of a carriage containing two first class and four second class compartments, 37 feet (say) in length, and about an inch and a half broader than ordinary carriages. There are three pairs of wheels, the centre ones performing the radiating process, and the end ones, connecting with the centre by rods, are made to the requirements of the case, no matter how great the curve may be. — *Stockton Independent, Hartlepool (England).*

### Union Pacific Railroad Bridge.

The Kansas City Journal of Commerce says:

"The railroad bridge of the Union Pacific road over the Kansas river will soon be ready for use Nearly half the original bridge is replaced by the new structure, and the piling has been removed for the erection of the substantial piers which are now completed. We believe that the permanent safety of this bridge requires the roadway to be several feet higher than it has been built, although nothing short of the flood of 1844 would endanger it when the old piling is all removed and sufficient water way is left between the piers. With the old pile abutments only twelve feet apart, the ordinary floods of every spring will accumulate a vast quantity of drift wood annually, jeopardizing the transit of the vast business hereafter to go over it."

### American Central Railway.

The readers of the *Union* are already aware that President Thompson, of the American Central Railway, has succeeded in the purposes of his mission to Europe, by securing iron and money for the completion of the road from the Mississippi river to the Indiana State line. He has entered into contract with the well-known, able firm of Bellott Des Marnes Brothers & Co., of Paris, whereby iron and money are by them furnished to the road in amount nearly sufficient to complete the grade, laying the ties and iron, bridge the road, and furnishing the rolling stock through the whole State. Active operations are to commence in March. These facts are placed beyond doubt by letters from President Thompson, now in the hands of Col. W. B. Sweet, Secretary of the road.

Early last spring Hon. John S. Thompson, on behalf of himself, James S. Thompson, Wells Willits, and L W. Thompson, of Mercer county; Wm. B. Turner, of Warsaw; Oloff Johnson and W. B. Sweet, of Galva, and Wm. F. Thomas, of Wyoming, proceeded to New York and caused a legal sale of the road to be made upon the first mortgage bonds, executed upon the road by the old Company to satisfy bonds owned by some of those gentlemen; and in May last the legal title to the

road passed to the Company since organized, and of which Judge Thompson was duly elected President, and Col. W. B Sweet, Secretary. The sale relieved the new Company from the embarrassments and obligations of the old. and gave them nearly a hundred miles of graded road bed and right of way through the State.

The new Company in July last issued $3,242,000 of first mortgage bonds upon its road, and sent President Thompson, with George M. Braggiotti, of New York, one of the Directors, with $1,225,000 bonds, to Europe, to buy iron and raise money.

The American Central Railway is destined to become an important link in the most important railroad thoroughfares on this continent.—*Galva Union.*

### Steel Pens.

The consumption of steel for pen making is enormous; twenty-four years ago it amounted to 120 tons annually, and was equivalent to about 200,000,000 of pens. This quantity is now greatly increased, in consequence of the penny postage and the improvements in steel pen manufacture. Some idea of it may be gathered from the fact that pens may now be bought by the trade at 4d. per gross, the box included, and that there are houses which produce 20,000 30,000 and even 50,000 pens daily throughout the year. The best material is said to be the Swedish iron, which is converted for the purpose both on the old plan in a furnace or by the Bessemer process, and subsequently hardened by tilting, casting into ingots, and rolling it into thin sheets.—*London Mining Journal.*

### The Law of the Street.

A suit of importance to all foot passengers on the streets of our cities, and to the drivers of all vehicles, was decided on Friday last, at a General Term of the Superior Court, New York city. The action was brought by Ann Baxter against the Second Avenue Railroad Company. This lady was crossing the road when her foot tripped on the rail of one track which threw her on to another, where a car ran over her and injured her very severely. The case had already been tried before a jury, where the plaintiff was awarded $3000 damages. The railway company, however, carried the case to the Superior Court, on a question of law growing out of a definition of "negligence" given by Judge Garvin, who first tried it. The Judge had charged the jury that if the plaintiff had been "guilty of any negligence" she ought not to recover, and he defined "negligence" as the "want of ordinary care and prudence." To this definition, reasonable as it is, the rail way company excepted; but Justice Monell, of the Superior Court, affirmed the definition to be correct, and also affirmed the judgment of $3,000 damages.

Judge Monell took occasion in delivering his opinion, to make some general remarks to the effect that the proposition of the railway company amounted to this, that "a foot passenger has no right upon the street as against a railroad corporation," and that "such seemed practically to be the belief of the drivers of most public conveyances and many private vehicles." Against this error he laid down the law to be, that the right to travel on a street or highway is common to all; foot passengers have the right to walk upon them; and, as a matter of law, "it is as much the duty of the vehicle to keep out of the way of foot passengers, as it is for the latter to escape being run over by the former."—This explanation of the law—although it has always been a law—should be widely circulated among the people. So far as the drivers of our railway cars are concerned, justice to them demands that we should say that they are in the main very watchful and careful. Some others are more in need of the lesson. Drivers of steam fire engines and of express and mail wagons seem especially to have the idea that no one has a right to the street but themselves when they are in a hurry. A perusal of the above case will show them their error, and how costly the mistake may prove to be.—*Phil. Ledger.*

### Oshkosh & Mississippi Railroad Co.

A bill was introduced into the Wisconsin Assembly on Wednesday last, to incorporate this company, to construct a road from Oshkosh, running South-west through the Upper Fox River Valley to some point on the Mississippi river to Grand County. This enterprise is an important one, and its fulfilment would tend greatly in the development of the State and its advancement in wealth and prosperity. The corporators named in the bill are: Joseph Stringham, Gabriel Bouck, David Atwood, S. D. Hastings, Wm. Taggart, John A. Parker, Henry Hewett, D. J. Seelye, Harmer Robbins, Isaac Hodges, S. S. Wilkinson, Joseph P. McGregor, J. H. Palmer, M. M. Davis and R J. Mason.

### French Gas-contracts and Pipes.

The city of Paris had, before the year 1852, been lighted with no less than six companies; and it undertook the lighting of many parts of the town by means of its own contractors for oil lamps; the consequence of this was that there was an irregularity in the price paid per lamp, and a defective service in all cases where there was not an inducement to the gas companies to carry their mains. To the companies there was the inconvenience of having their capital invested upon a short lease, and of being exposed to the gradual confiscation of it upon the termination of the lease in 1863, at which time the town would enter upon possession of the whole of the *canalization* (as the French term the assemblage of mains that are employed for the distribution). Both parties, therefore, had an interest in agreeing upon a new treaty for the supply of gas; and the administrators of the six companies assembled together and appointed a certain number of their body to discuss with the Prefect and the *Conseil Municipal* the terms upon which the service of the gas supply should hereafter be organized under one company. The city of Paris was in this case aided by the authority of a commission of scientific men, consisting of M. Regnault, Chevreul, Morin, and Peligôt, who were charged to discover the real price at which the gas could be made; these gentlemen had at their disposal the factory of St. Cloud, in which every facility was given them to carry on their experiments. Of course the people employed by the gas companies found great fault with the conclusions to which the commission were led, and there was a fierce discussion raised as to the correctness of the experiments upon which they were disposed to base their report, which seemed to wax warmer and warmer in proportion as greater publicity was given to the report of these gentlemen. But in the midst of this turmoil the directors of the new gas company received an intimation that if a sum of £320,000 were paid to the Princess Mathilde, the Imperial Government would cause all further discussion to cease, and the company should have the concession on the terms to which it would agree. Strange as this style of bargain may appear to unsophisticated minds, it was nevertheless carried out, the money was paid, and the company became the contractors for the gas-lighting of the city of Paris upon what were virtually its own terms. These appeared hard enough on the company, but as it has always paid from 16 to 19 per cent., it may be considered that they were at least favorable to the company and to the disadvantage of the ratepayers.

The French engineers have adopted a system of leading mains which consists in the use of wrought iron pipes surrounded by a coat of bitumen, on what is called the "*systeme Chameroy*," instead of cast-iron pipes put together with spigot and faucet joints, in the style that we generally adopt. Great doubts are expressed by the English engineers as to the durability of this kind of pipe; but the experience of the Paris engineers, which has now extended over the period of twenty-four years, may be considered to be decisive on this point; nor can there be any cause at work with the passage of gas along the pipes that can be considered otherwise than favorable to their durability. At any rate, the results of observations made upon one thousand metres of cast-iron and of wrought iron pipes, in the course of the year 1861, gave the following results, that seem to place the question beyond doubt. The pipes yielded a loss of, as follows:

| | Cast-iron. | Wrought-iron. |
|---|---|---|
| In consequence of accidental breakage.. | 1.60 | 0 460 |
| In consequence of use by time or depreciation ..... | 0.353 | 0 193 |
| In consequence of shaking of joint.... | 1.77 | 0.520 |

Guided by these results, which have only confirmed the long practice of their engineers, the Paris Gas Company has proceeded to lay down as much as 72 per cent. of their main pipes in this style against 27 per cent. of cast-iron pipes, and 1 per cent of lead pipes. It is true that in Paris the service pipes are all of lead, when in England wrought-iron is generally used, and this must be considered to have a considerable increase upon the loss by leakage; but in Paris the total loss that was ascertained to have occurred in this manner, in the course of the year 1863, was a shade more than 10 per cent.; whereas the average loss of the London gas companies has been estimated at 25 per cent. of the total of the gas made—it was 10,083,678 meters cube upon 100,833,258 meters cube, ascertained at the consumers' meters. It is questionable whether the greater care with which the operations of the Paris Gas Company are conducted may not account for much of the difference that is thus recorded; but this appears certain, that the loss through the wrought iron mains, is less than with cast-iron mains; and the expense of transporting them would be considerably less than would be incurred in the case of the latter, which would be an object of considerable importance.—*Builder.*

The Emperor of Russia has confirmed a concession to Sir Morton Peto, on behalf of Messrs. Peto, Petts and Waring Brothers, of a railway, in prolongation of the one from Riga to Dunnabourg and Witebsk, and from the latter place to Orel, a distance of five hundred miles.

### The New York and Oswego Midland Railroad Company.

Pursuant to the call of the Hon. S. Gordon Delhi, Chairman of the General Committee the directors appointed at a meeting of the friends of the New York & Oswego Midland Railroad Company, held at the St. Nicholas Hotel in New York, on the 13th December, assembled at the Delavan House, Albany, on the 10th January, inst., and continued in session for two days.

The Hon H. R. Low, of Sullivan county, was called to the chair, and B. Gage Berry, of Norwich, appointed Secretary.

Upon calling the roll of directors, the following gentlemen were found to be present:

The Hon. D. C. Littlejohn, of Oswego; Gershom P. Kenyon, of Syracuse; Joseph W. Merchant, of De Ruyter; Elisha C. Litchfield, of Cazenovia; Edward T. Hayes, of Norwich; John A Randall, of Norwich; the Hon. S Gordon, of Delhi; Apollos C. Edgerton, of Delhi; the Hon. H R. Low, of Monticello; Edward Palen, of Fallsburgh; Homer Ramsdell, of Newburgh; Nathan Randall, of Homer, New York.

Delegates from the various towns upon the route appeared and presented subscriptions made by their various localities, and a committee of three, consisting of Messrs. Gordon, Kenyon, and Palen, was appointed to examine the subscriptions and report the amount of the same. A couple of hours were spent in interesting discussions, during which many important facts and statistics were brought out, when in order to give the committee time to discharge its duties, the board adjourned until January 11, at 9 A. M.

Upon the reassembling of the board, pursuant to adjournment, Mr. Gordon, from the Committee upon Subscriptions, reported that the full sum of $1,000 per mile, to wit, the sum of $225,000 had been subscribed, and ten per cent. thereof paid to the directors, whereupon the necessary affidavits were made by the directors, the articles of the association of the company were filed in the office of the Secretary of State, and the board proceeded to the appointment of its officers.

After a free and full interchange of sentiment by the directors, the Hon. Dewitt C. Littlejohn, of Oswego, was unanimously chosen President of the Board, and at once entered upon the duties of the office.

Resolutions were adopted providing for the election of a Vice-President, Treasurer, Secretary, Land Agent, and Chief Engineer, in pursuance of which Homer Ramsdell of Newburgh, was chosen Vice-President; Walter M. Conkey, of Norwich, Treasurer; Samuel Gordon, of Delhi, Land Agent, and A. C. Powell, of Syracuse, Chief Engineer.

A committee of three, consisting of Messrs. Low, N. Randall, and E. C. Litchfield, was appointed to report by-laws at the next meeting.

On motion of Mr. Low, the resident directors in each county through which the road is to pass, in connection with the Land Agent, were authorized to appoint local agents in each county to procure rights of way, and solicit local subscriptions.

Mr. Low also offered the following, which was unanimously adopted:

*Resolved*, That it is the judgment of this Board of Directors that in connection with the enterprise for which we are organized (to wit, to build a road from Oswego to the city of New York), they will build a branch road from some point on this road in the county of Orange to the Hudson river at Newburgh, whenever the inhabitants of Newburgh and along the line in Orange county shall subscribe $500,000 to the stock and bonds of the company.

It was also unanimously resolved that in the judgment of this company, in order to facilitate the construction of this road, that the Legislature be requested to give authority to the towns in the several counties through which the road runs to take stock in said company and issue their bonds therefor.

The resignation of John Crouse, of Syracuse, as a director was accepted, and George Barnes, of the same place, was appointed to fill the vacancy. It was also unanimously

*Resolved*, That this board will construct that portion of the line of the New York and Oswego Midland railroad which lies north of Syracuse upon the east side of the Oswego river to some point north of the village of Fulton (reserving the right to locate the terminus upon either side of the river in Oswego City), provided the subscriptions on the line between Syracuse and Oswego, with the bonds upon the same, shall be sufficient to construct and equip the road for that distance, and provided further that the right of way shall be generally furnished to the company free of cost.

The board then adjourned, to meet at the same place on the 24th inst., at 12 M.

The proceedings of the board were very harmonious, and exhibited a determination to build the road upon the best route and in the shortest possible time. The feeling indicated by the large delegations present from all parts of the line, showed that the money will be forthcoming, and that the early completion of the New York and Midland railroad is a fixed fact.

### The Case of the Atlantic & Great Western Railway Company.

On the 19th inst, in Philadelphia, the legal argument appertaining to the important railroad controversy between the Pennsylvannia and the Philadelphia and Erie Railroad Companies, on the one side, and the Atlantic & Great Western Railway Company on the other, was concluded in the Supreme Court of Pennsylvania. The question was on the application for an injunction by the two first-named companies to restrain the Atlantic & Great Western Railway Company from entering into an agreement with certain other companies to lease their roads. The legal points presented in favor of the injunction were as follows:

The Atlantic & Great Western Railway now runs from Salamanca, on the Erie Railway across the northwest angle of Pennsylvania, into Ohio, and thence to Cincinnati and St. Louis. They have leased the Catawissa, a part of the Reading and East Pennsylvania roads, and the Morris & Essex road, from Milton, in Northumberland Co., to New York. This leaves a gap of 225 miles to fill in from Milton to Franklin Penn. This gap they endeavor to fill by buying up two local charters, viz: The Western Central, from Franklin to Bellefonte, and the Lewisburg, Centre and Spruce Creek, from Bellefonte to Milton. An act passed in 1861 permits roads to make leases of, and contracts with each other, "provided the same are connected with each other directly or through intervening roads." To sustain these leases the Atlantic & Great Western Co. insist since the Philadelphia & Erie road intersects the Atlantic & Great Western at Corry, and the Catawissa at Milton, that the Philadelphia & Erie is a connecting road in the sense of the act of 1861. This the complainants deny. First, because the Philadelphia and Erie is 4ft. 8½ in. gauge, while the Alantic & Great Western is 6 ft. Secondly, because the face of the contract shows the connecting roads intended were those not yet built, and not the Philadelphia & Erie road.

Against the injunction, the principal points of the pleadings were as follows:

First. The right of the Catawissa Railroad Co., to make the lease of November 1st, 1865, with the consolidated Atlantic & Great Western Railway Co., and the Western Central Railroad Co.

Second. In case these parties have not this right, whether the Philadelphia & Erie Railroad Co., and the Pennsylvannia Railroad Co., by the bill filed by them, have any right to contest this point; or wether Andrew Scott, an original stockholder in the Atlantic & Great Western Railway, the company originally incorporated by the State of Pennsylvania, in the bill filed by him against the Atlantic & Great Western Railway Co, and others, has any right as a stockholder, to contest the same points. A point also presented in the discussion of the case was, whether the Atlantic & Great Western was duly consolidated under the Pennsylvania act of March 24th, 1865, authorizing the consolidation of railroad companies organized under the laws of Pennsylvannia with railroad combanies orgonizing under the laws of other states, where such companies form and operate a continuous line of railroad with each other or by means of any intervening railroad The Philadelphia & Reading Railroad Co., and the East Pennsylvania Railroad Co, were allowed to intervene as parties to the preceedings by virtue of a contract alleged to have been made by them for the formation of a continuous line of railroad, of the same gauge as the gauge of their own roads, with the Atlantic & Great Western and the other companies defendants in the equity suit. By the contract with the Reading Railroad Co., it will be seen that a continuous line of railroad with the narrow gauge, is to be formed from the cities of Cincinnati, Dayton and Cleveland, in Ohio, to the cities of Philadelphia and New York, traversing the central part of the State of Pennsylvania.

The decision of the Court will materially affect the relations of the carrying trade between the teeming granaries of the West and the manufacturers and merchants of the seaboard. Millions of dollars of capital and hundreds of miles of road are controlled by each party, the value of which, on either side, is asserted to be largely dependent upon the decision.—*Am. Railroad Jour.*

### End of the Schuyler Fraud.—Justice at last.

Justice and equity in the New Haven Schuyler frand have been slow, bnt not the less sure. Mr. Vanderbilt and a few other persistent claimants on the company for the wrongs of their own President and agent, have pnrsued their remedy at law until final judgment in their favor has been rendered by the New York Court of Appeals, and about $900,000 has now to be paid to them by the company. Ahout two years ago, most of the creditors, worried out by the law's delay, accepted one share for two of the fraudulent certificates issued by Schuyler. The capital was raised from $3,000,000 to $4,000,000 to meet this settlement. The New Haven Jour-

nal announces that a further increase will now be made to $5,000,000, and the $900,000 of judgments paid off. It has thus cost the company, not only their reputation for honest dealing in 1854, but two millions of dollars in 1864 and 1866—besides vast intermediate counsel fees and court fees—for what might have been and ought to have been promptly and honorably settled twelve years ago for about half the money. The principle is now settled by the highest court in New York that railroad and other corporations are responsible in money damages for the fraudulent acts of their own agents. It was virtually settled, long before the Schuyler fraud, in the Kentucky Bank case, but the New Haven managers refused, in 1854, to recognize the precedent.

The New Haven Journal says:

"On Monday the Directors met, and voted to increase the capital stock of the road to $5,000,000, which will raise enough funds to meet the amount required. On the 27th inst. the subscription books will be opened, and all who are stockholders then will be allowed to subscribe for the new stock by surrendering two and a half shares of their old stock for one of the new, and paying for the new stock $75 per share. The capital stock of the company was formerly $3,000,000. The amount of fraudulent bonds was $2,100,000. A large part of these were bought up by compromising with the holders, the capital stock being increased to accomplish it, and the holders giving two shares for one. The present increase will now pay up all the liabilities caused by the fraudulent issue. The road is considered worth $10,000,000, and there is no doubt that the new stock will soon be taken, the great clog which the Schuyler frauds have been for years to the road will be removed, and the road will now enter on an era of great prosperity.

### Little Miami Railroad.

The following is the financial condition of the Little Miami Railroad as shown by the report of D. G. A. Davenport, the Auditor, for the year ending Nov. 30th, 1865:

EARNINGS.

| | | |
|---|---|---|
| Passenger earnings | $1,310,171 18 | |
| Freight earnings | 959,306 70 | |
| Express and Mail earnings | 155,236 82 | |
| Rent of track and depots | 65,939 00 | |
| | | $2,499 73 701 |
| Received from C. & I. C. Co., under contract for division of earnings | | 10,662 48 |
| | | $2,510,376 18 |
| Transferred to C. H & D Co., under contract for division of earnings | 18,987 38 | |
| Transferred to C. C. & C. Co., under contract for division of earnings | 44,997 80 | 63,985 18 |
| Total earnings after division with other Co's. | | $2,446,391 00 |

EXPENSES.

| | | |
|---|---|---|
| Transportation expense | $683 652 88 | |
| Car expense | 171,328 98 | |
| Locomotive expense | 104,906 96 | |
| Road expense | 393,772 97 | |
| Oener l expense | 75,693 92 | |
| Loss and damage | 31,629 38 | |
| Total working expenses | 1,460,388 39 | |
| Interest | 107,400 35 | |
| Taxes, State and National | 112,558 92 | |
| | | $1 680,347 66 |
| Net earnings from transportation | | 766,043 34 |

The working expenses are 58.42 per cent. of the gross earnings.

The election for Directors for the year 1866, resulted in the re-election of the old Board as follows: Jos. C. Butler, Jos. Torrence, Nathaniel Wright, James Hicks, Jr., Larz Anderson, W. H. Clement, Alphonso Taft, Chas. H. Kilgour and Henry Hanna of Cincinnati; John Bacon, of Springfield; Abraham Hivling of Xenia; Jos. R. Swan, of Columbus.

At a subsequent meeting of the Board, the following gentlemen were again elected to the several positions named: W. H. Clement, President; Chas. H. Kilgour, Secretary; S. E. Wright, Treasurer; D. G. A. Davenport, Auditor; E. W. Woodward, Superintendent.

AIR LINE RAILROAD FROM LOUISVILLE TO CINCINNATI.—A bill for an air line road between these places passed the Kentucky Legislature last week. The South is determined to favor Cincinnati in spite of the latter's indifference to her best interests.

### MONETARY AND COMMERCIAL.

The demand for money at the discount houses has not been so pressing during the week as for some time past. As the close of the packing season is near, the necessity of money for carrying the pork crop becomes lessened; besides, returns are beginning to be realized for shipments made to the East, and we may therefore look for a speedy "letting up" of the money market.

Exchange is firm, and in good demand at quotations.

| | Buying. | Selling. |
|---|---|---|
| N. Y. Exchange | par. | @50c per M. |
| Philadelphia | par. | @50c per M |
| Boston | par. | @50c per M. |
| Baltimore | ¼@ ... dis. | 1-16@ ... dis. |
| Silver | 31 @34 pr. | 34 @36 pr |
| Gold | 39¼@39¾ pr. | 40@40½ pr. |

The New York gold market fluctuates just enough to make it interesting to the operators, but there has not been any material change since our last issue.

The general business of the city is quiet and but little doing in any department of trade. Merchants, however, are preparing to do all the business that may offer during the coming season, so that parties at a distance need not fear but that they can get their wants supplied.

The *N. Y. Tribune* says:

The Railway share list was dull and steady early in the day, and little disposition shown to operate, but at the Second Board the market was firmer, and a disposition to cover short contracts was manifested. Cleveland & Pittsburg and Rock Island were very firm and were in demand. Late in the day the market was firm and all stocks were in good demand. The closing prices were: Ohio Certificates, 25¼@25½; Cumberland Coal, 44¾@45; Quicksilver, 40¼@40½; Mariposa, 13; New York Central, 92@92⅛; Erie, 81⅝@81¾; Hudson River, 101⅝; Reading, 99¼@99⅜; Michigan Southern, 69¼@69⅜; Cleveland & Pittsburg, 81@81½; Rock Island, 99⅝@99¾; North-Western, 28½@28⅝; North-Western Preferred, 55¼@55⅜; Fort Wayne, 93¾@94.

Money has been freely offered to-day, but the rate may be quoted at 6 per cent. on stock collaterals. Some few transactions are quoted at 5 per cent., but the rate is substantially advanced to 6 per cent. on all street operations.

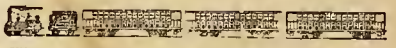
Speculators for the rise in Railway shares are now trying to make it appear that the decrease in Railway earnings is but a temporary matter, and that as soon as navigation opens there will be an increase which will compensate for the present loss. It is even argued that "the hog crop" is to make up for other deficiencies, and bring up the receipts in excess of 1865. If this furnishes any comfort to the holders of Railway shares, they have a right to enjoy it; but we fear the idea will prove delusive. It should not be forgotten that the Railway business of 1864 and 1865 was extraordinary; increased largely by the war, which not only forced products through unnatural outlets to a very considerable amount, but threw over East and West Railway lines an immense amount of transportation for Government. The time having arrived when this business must be lost, it would be very surprising if Railway earnings did not diminish somewhat in the ratio of the diversion, and we doubt, therefore, if the hog crop can prevent a reduction in Railway business, however desirable such a result might be to the managers of the lines and the holders of stock.


**WRIGHTSON & CO.**

**Printers,**

167 Walnut St., Cincinnati, O.

**The Old And Reliable Route.**



**Through to Pittsburg without Change.**

THE PITTSBURG FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

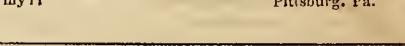
H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

**Change of Time, Monday, Aug. 7th.**

THE

**Atlantic & Great Western Railway**



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES, passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M
Arrive at Cincinnati.....6:30 A. M., and 7: 0 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

# RAILROAD OFFICES AND AGENTS

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A B Waters, Freight and Ticket Agent, Cor. Third and Walnut

**Ohio & Mississippi**

W. E Bruce, Freight and Ticket Agent, Gagette Building, 82 West Fourth Street.
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J R. Reed, General Freight Agent. Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg Contracting Agent, Vine St. under Burnett House.
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 63 W. Third St.
Sydney Rice, Contracting Agent, " "

**Central Ohio & Pittsburg, Columbus and Cincinnat**

James E Shields, General Agent, No 77 W. Third St.

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A J. Dey. S W Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passeoger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burnet House.

**New York Central.**

G. B Gibson S. W. Passenger Agent. W. H. Page, Local Passenger Agent, 8 and 9 West Third St.
Geo S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Pittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent. No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.


# 1865.

CHANGE OF TIME!

By the Broad Road Gauge Route, the

# Atlantic & Great Western R'y.

TWO THROUGH TRAINS DAILY

TO

EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI | 9:00 A. M. | 10:40 P. M. |
| HAMILTON | 9:57 " | 11:43 " |
| DAYTON | 11:30 " | 12:55 A. M |
| SPRINGFIELD | 12:35 " | 1:45 " |
| URBANA | 1:00 P. M. | 2:15 " |
| GALLION | 5:25 " | 6:10 " |
| MANSFIELD | 6:50 " | 7:15 " |
| AKRON | 9:30 " | 10:00 " |
| RAVENNA | 10:05 " | 0:40 " |
| LEAVITTSBURG | 11:00 " | 11:40 " |
| GREENVILLE | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE | 1:20 " | 2:30 " |
| CORRY | 2:45 " | 3:55 " |
| Arrives SALAMANCA | 4:58 " | 2:55 " |
| NEW YORK | 10:30 P. M. | 1:00 " |
| BOSTON | 2:30 " | 8:00 A. M. |
| PITTSBURGH | 2:20 A. M. | 3:20 P. M |
| HARRISBURG | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA | 5:35 " | 6:55 " |
| BALTIMORE | 5:45 " | 7:00 " |
| WASHINGTON CITY | 9:05 " | 10:35 " |

The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts, Ft. Wayne and Chicago Railroad.

THIS IS THE ONLY ROUTE

TO THE

OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

Ample time is allowed, at all hours, for meals.

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and Southwest.

E. F. FULLER, Gen'l Ticket Agt. D. MCLAREN, Supt.
J. P. SARVER, CHAS. COOK, } Passen Agents.



# CENTRAL RAILROAD

—OF—

NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6:30 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahanoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton, etc.

9:30 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:30 m. TRAIN—For Easton, Allentown, Manch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg etc.

4 p. m.—For Easton, Scrantou, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:30 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.



NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex): 1:30 a. m.; 12:15 (Ex); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:20; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a.m. (Ex.); 3:00 (Ex. 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex); 3:00 (Ex.); 12:5; 8:00 p m.

For Connecticut River Railroad, 8:00 a. m. (Ex); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:30 p. m.

For Naugatuck Railroad, 8:00 a. m; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

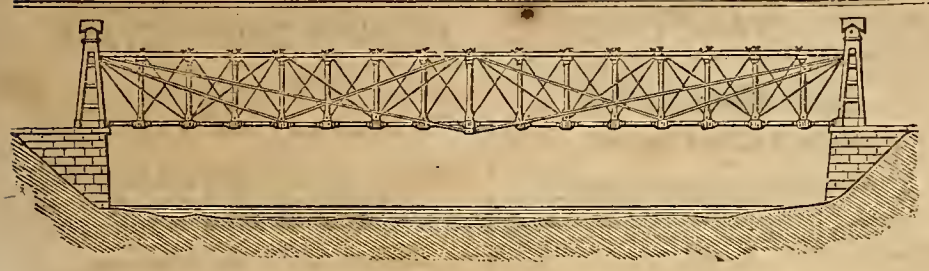
Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.



NEW-YORK AND HARLEM RAILROAD Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



*(Plan of Idyle.)*

FINK'S PATENT

## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

**SCREW BOLTS,**

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

**M. W. BALDWIN & CO.**

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring). Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

**KNOX & SHAIN,**

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

**FINDINGS,**

AND

**MACHINERY,**

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

**BUSH & LOBDELL,**

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

**Chilled Wheels and Tyres**

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

AMERICAN BANK NOTE COMPANY.

***Bank Note Engravers & Printers.***

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

**SUPPLIES,**

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

RAILWAY SPRINGS.

**FREIGHT**

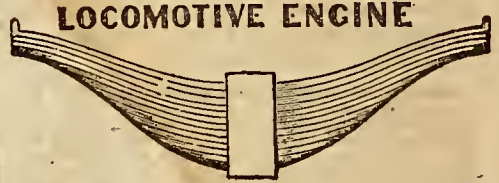




*PASSENGER*



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS.**

Made at his Shops in Philadelphia. Employing only the most experienced workmen and best MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y.

Shops—Seventeenth and Coates St. PHIL.

---

**Railroad Iron.**

The undersigned agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

W. M. F. HEWSON,

STOCK BROKER,

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and Taxes collected.

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

**SPEED, SECURITY AND COMFORT,**

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimore*
J. H. SULLIVAN, *Gen. Wes. Ag't. Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M. |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M. |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M. |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leavea Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

**SUNDAY, JUNE 19, 1865.**

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, aplease apply at the Ticket Office, No. 82 Fourth Street, adjoining the Gazette Office: No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E. FOLLET, General Tick Agent.

W. D. GRISWOLD, General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place anites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

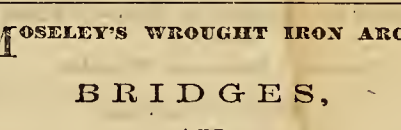
## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



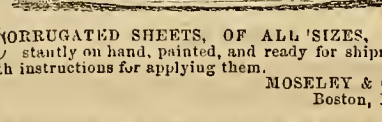
CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

## CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

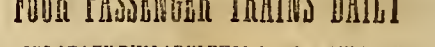
**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches for same, &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, THOS. T. TASKER, JR., HY. O. MORRIS. CHAS. WHEELER S. P. M. TASKER

## Philadelphia, Wilm'gton & Baltimore RAILROAD!



## FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M (Express); 2.30 P. M.; 11.30 P. M night.

On Sundays, 4.30 A. M; 11.30 P. M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, FEBRUARY 8, 1866.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE-No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 10 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrears are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

W. A. MUNSELL.
*General Agent.*


## Arrival and Departure of Trains.

| | *Depart.* | *Arrive.* |
|---|---|---|
| **LITTLE MIAMI.** | | |
| Cincinnati Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M |
| Columbus Accommodation | 4:00 P. M. | 4:00 A. M |
| Morrow Accommodation | 5:00 P M. | 8:00 A. M. |
| Night Express | 7:00 P. M. | 3:50 P M |
| Night Express | 10:00 P M. | 9:40 A. M. |
| **MARIETTA AND CINCINNATI.** | | |
| Mail | 5:00 A M. | 7:30 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P M | 5:45 A. M. |
| **CINCINNATI, HAMILTON AND DAYTON.** | | |
| Indianapolis & Cambridge City | 7:00 A M. | 9:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:50 P. M |
| Dayton and Sandusky | 7:00 A. M. | 5:00 P M. |
| Richmond and Chicago | 7:00 A M. | 9:50 P M |
| Dayton Accommodation | 6: 5 P. M. | 9:35 P M |
| Dayton Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A M. |
| Richmond & Chicago | 5:30 P. M | 1: 0 P. M. |
| **CHICAGO & GREAT EASTERN.** | | |
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " " | 5:30 P. M. | 1:20 P M |
| **INDIANAPOLIS AND CINCINNATI.** | | |
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A M. |
| Mail & Springfield Express | 2: 0 P. M. | 4:30 P. M. |
| St Louis and Chicago Express | 7:30 P. M. | 1:10 A. M |
| Lawrenceburg and Harrison Accommodation | 4:30 P M. | 8.30 A. M. |
| Harrison Accommodation | 10:15 A M | 2:2 P. M. |
| **CINCINNATI AND INDIANAPOLIS JUNCTION R. R.** | | |
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |
| **CINCINNATI AND ZANESVILLE.** | | |
| Mail | 9:00 A. M | 4:35 P M |
| Caboose Accommodation | 4:00 P. M. | 8:00 A. M. |
| **KENTUCKY CENTRAL.** | | |
| Express | 6:00 A. M. | 6:30 P M |
| Accommodation | 1:5 P. M. | 11:00 A. M. |
| **ATLANTIC AND GREAT WESTERN RAILWAY.** | | |
| Morning Express | 9:10 A. M. | 6:30 P. M |
| Night Express | 0:50 P. M | 4:30 A M. |

### The Cincinnati South Railroad.

We see several small, sluggish movements towards making the road from Cincinnati, South. They are enough to show, that the project, after thirty years incubation, is not entirely dead, and may possibly be enough revived to go on with the work. In view of this state of things, we propose to say a few more words. Mr. David Sinton, chief proprietor of the Lexington & Danville Road, says:

Said Company being fully aware of the responsibilities attached to its position, has been, for more than three months, actively and earnestly at work doing all things deemed practicable to extend its road, not only through the State of Kentucky, but also making such arrangements as will insure its continuation in the State of Tennessee until a connection is made with the great Southern railroad system, and for this latter purpose two corps of engineers, has been, for the last two months, steadily at work in Tennessee, are still in the field, and will continue until a thorough exploration is made and the best route determined. To devise the best and most available policy in reference to the quality and early completion of this work has elicited a very thorough consideration. The results arrived at were: The work must be done in the best manner, with all the elements of a great trunk line, and to do this successfully it must be self sustaining. To raise the means necessary for the above purpose would, it was thought, be impracticable along the line of the road, and, inasmuch that great benefits would be conferred on parties not able or willing to furnish the funds for its entire construction, it has been deemed wise and proper, that they contribute by way of a bonus, a certain amount, say two millions of dollars and to prevent any improper action said bonus will not be called for, as far as the city of Cincinnati is concerned, except when the road reaches Danville, one-half will be payable, and the remainder when it is extended to a Southern connection.

This is very well but there are two things omitted, which are of the greatest importance: 1. The responsibility of the Lexington & Danville Company either to make the road properly, or to use the money judiciously The Lexington & Danville Company heretofore have been too weak to do anything; and we presume, Mr. Sinton and his friends are now almost its only support. If Cincinnati can get a good *direct* railroad to Knoxville, or some point on the Virginia & Tennessee Road, east of it, for a bonus of two millions, she will have done well; and the road will return her tenfold. But, before her citizens will contribute such a sum, they must know that it goes into responsible hands, and that the road will be thoroughly made 2. Supposing this to be secured, the principal consideration still remains. In Mr. Sinton's letter to the Chamber of Commerce, above quoted, he says nothing about the *route*. He is very careful upon this point. He speaks about reaching the line of "Tennessee," and of its continuance there; but he says nothing about *where*. He says, there are two "corps of Engineers" steadily at work to ascertain the best route; but, the best route for the Danville Company, may be very far from being the best route for Cincinnati. The Danville route may do, if from Danville the road takes the best route to Knoxville, this will do. But, suppose Mr. Sinton and Company think it best to go to McMinnville, or some point in Middle Tennessee, or farther down the Cumberland, this may be of advantage to Cincinnati; but it is not the main object in view, and not what Cincinnati will make a great effort for. There are three different interests, which want to divert the South side road of Cincinnati a good deal to the West, with the idea, that two birds may be killed with one stone. First, we have a good many people, dealing with Nashville, who don't see why, if we make a road South, it may not be made in the directinn of Nashville. It will facilitate their business and may increase somewhat the general volume of trade. Another class want it to go towards McMinnville, because there are already some railroad interests there, and it would aid other interests on the Cumberland. A third party, (and this is probably the position of Mr. Sinton's Danville Company) want to diverge enough to the West, to touch the Oil interests on the Cumberland, and then turn East again to Knoxville. Now, what is the objection to these projects? Simply this, that *not one of them will attain the grand object in view.* Each of these plans is well enough in itself. There is no objection to them, considered as a *local plan*, but they are nothing to what Cincinnati really wants. The plan of a *direct road* South from Cincinnati is, *to get the entire trade of Georgia, South Carolina and North Carolina*, so far as they trade with the West at all. Now if any one will take the map, and suppose a tolerably direct line of road, from Cincinnati to Bristol or Knoxville, there connecting with Atlanta, and the Virginia & Tennessee road, he will see that no portion of the trade of Georgia, South Carolina, North Carolina and Virginia, *can* be diverted to Louisville or St. Louis, or in its course to the North, go to any place but Cincinnati. To go away from Cincinnati, it must go hundreds of miles out the way. Now, with this object in view, to diverge the road to the South West is to destroy its great end. It may make a useful local road, which is very desirable, but will not be *the* road which is wanted. To secure the entire trade of the immense country we have described, which with East Kentucky and South-West Virginia, comprises not less than 200,000 square miles, would of itself be sufficient to make the whole trade of a great city. It would add 200,000 to the population of Cincinnati. It would add a still greater proportion to its wealth. We do not want an indirect, circuitous road, for we have it already; any one can go through Louisville, Nashville and Chattanooga to Knoxville, by rail. We can

go to Nashville by both rail and water. The simple truth is, that there is no way now from Cincinnati to East Tennessee, Georgia, or South Carolina which does not enure to the benefit of Louisville and Nashville. If Cincinnati is willing to lose two thirds of her trade with the South, and carry on the other trade, through Louisville, why make any road South, or aid in any? She will accomplish but little more than this, by making a road in the direction of Nashville, or McMinnville, or even the Oil region. 200 miles of solid, thorough road, would put Cincinnati merchants in the heart of the South, with no competition from the West, and would pour incalculable wealth into their laps. Why can not this be done? 200 miles would cost $10,000,000, and if $4,000,000 of that were secured in Cincinnati, $1,000,000 could be got on the route, and $5,000,000 on mortgage. Why not do it at once? Will it be said, that four millions cannot be got in Cincinnati, for so grand an object? It is not more than 3 per cent. on its property. It *can* be done; and if there be not a will, why should the road be made at all? We still think, that if the road should leave Paris, and thence through Richmond, on a direct line to Bristol or Knoxville, it would be far the best route for Cincinnati. If an arrangement can be made with the Covington road to Paris 80 miles, there would be not more than 180 miles of new road required.

### Tubular Boilers Condemned.

The recent fearful explosions on the Mississippi have aroused public feeling in some degree against the criminal negligence which permits the use of these engines of destruction, till a terrible disaster hurries the confiding unfortunates into eternity or leaves them torn and scarred to linger out a crippled existence.

The Louisville *Courier* says:

The belief has been long entertained by all practical engineers and mechanics that tubular boilers on our Western waters are unsafe, and we have repeatedly called the attention of the public to it, but until very lately but little heed has been paid to the subject. Now, however, after so many fatal disasters have occurred in rapid succession, the public are aroused, as it appears that nearly all, if not every one, of the late disasters were boats with the tubular boilers. The W. R. Carter's boilers were made by the best practical boiler maker in the West, and of the best Juniata iron, one whose boilers made in the regular way, with only two or four return flues, were never known to explode in more than twenty years' experience. The W. R. Carter's were made to order, were tubulars, and have exploded, causing the loss of probably one hundred lives, and a quarter of a million of property.

The use of tubular boilers was first introduced only a few years since, something after the style of locomotive boilers on railroads, full of small tubes instead of flues. The great objections urged against them were that they would get clogged with the mud, sediment, and "scale," that is made so freely in our muddy waters; also that it is impossible to clean the boilers, an indispensable necessity on our rivers. Engineers almost universally declare against them, and when occasion requires, to cool down suddenly, they dare not open the flue caps for fear of a sudden collapse of the tubes or small flues, which contract almost instantly on exposure to either cold air or the introduction of cold water. Our local inspectors, we believe, sent on a remonstrance to Congress, some time ago, against the tubular boilers, but no action was taken in regard to the matter. Now that a few thousand lives are lost, and many thousands of dollars, something may be done.

These fearful explosions always occur in times of high water, or rather in muddy rivers, after a sudden freshet, when the waters are turbid and full of sediment.

The underwriters of Louisville are the first to take a determined stand in the interest of humanity. They have resolved to insure boats with tubular boilers no longer. Many of the boat owners are removing these boilers, and we earnestly hope that while the horror of the late calamities is still fresh in the public mind, such prompt and decided steps may be taken as will forever inhibit the repetition of the wholesale human slaughter of the past fortnight.

### Northern Pacific Railroad.

We give the following sensible article relative to the Northern Pacific Railroad from the *Menominee Herald*. There is no competition between the routes to the Pacific,—we need them all, and the sooner we get them the better.

The Lansing State *Republican* seems to have taken great offence at the movement made to bring about the speedy construction of the Railroad from Detroit through the upper part of the Lower Peninsula, through the Straits of Mackinaw, and thence through the Upper Peninsula to the head of Lake Superior, which will form, and will be, a necessary link in the connection of the Northern Pacific Railroad with the East.

We have no doubt that some of the complaints made by the *Republican* are well taken; but, is it not a fact, that every great public enterprise is attended with some evils and drawbacks? We think that the importance of the undertaking to the whole State ought to be taken into consideration, and that, that should be allowed to outweigh any minor evil that grows out of it.

We all know that without the aid of a grant of land from Congress, this road cannot be built; and we all know that the building of the road will render the lands in the northern portion of the Lower Peninsula and the Upper Peninsula valuable which are now nearly worthless.

We know that the building of the road, as contemplated, from Detroit to the Straits of Mackinaw, and thence to Escanaba, and on through the Upper Peninsula, will open to settlement large tracts of fertile land, and to occupation a large amount of water power, and be the means of opening to the world great quantities of iron, copper, lead, silver and marble, which abound in the Upper Peninsula, and that along its track will be opened farms, and villages will be built up, and in a few years the population and resources of the State would be doubled; we know that a railroad must be built along our northern frontier to Washington Territory, or that one will be built in the British Possessions, and that it is only a question of time when it will be built. And there is a question which goes beyond all this, and that is, as to whether the Upper and Lower Peninsula shall remain one State or become two States. And we believe that the construction or non-construction of this railroad will determine that question.

The Upper Peninsula is constantly increasing in population, and the time will come, when its people will refuse to travel through three States or the Queen's dominions, all the year to reach their seat of Government, or even to convey a convict to the State Prison. The construction of this road would obviate this difficulty, and bring the two parts of the State together, so that it would remove the difficulties resulting from the separation by the Lakes.

But is not the difficulty in the eye of the State *Republican* a local one? Perhaps the *mote* consists in the fact that the proposed road does not pass through Lansing. If so, we think that local questions should not affect the public good, and if the route could be carried through Lansing, we do not doubt all the people of the Upper Peninsula would be pleased with the idea. But the railroad we must have, or see all the vast trade which would follow its construction diverted from the State altogether, and perhaps from the nation. We have always thought our leading men in the Lower Peninsula short sighted in one thing. They have been always ready to aid and foster enterprises which built up Wisconsin and Illinois, but could never seem to see, that they could do anything to build up their own State.

It seems now to be the case. They cannot see that the construction of this Northern Pacific Railroad would bring all the vast stores of Asia, Washington Territory and the Pacific trade, the wealth of the Rocky Mountains, the vast product of millions yet to inhabit Northern Minnesota and Dacotah, the millions of undeveloped wealth of the Upper Peninsula, right through the heart of the State, building up towns and cities along its track. They do not see this, but looking through the eyes of moles, they grope along underground, and let other States reap the prosperity resulting from more liberal and enlightened views.

Were we in Congress, we would labor early and late for the passage of any and every bill that would aid the construction of this road, and then labor until it was constructed, and then when the State had doubled its population through its construction, we would ask for no better record, than to point to it and say, we labored to bring that about until the fact was accomplished.

The future prosperity of the State depends on the construction of the railroad from Detroit by the Straits of Mackinaw to the head of Lake Superior, and every member of Congress and every public man in the State ought to give their aid to the work, and now is the time to do it,—or never,—for when Chicago has reached out her arms and secured the connection, it will be too late.

☞ The underground tube or tunnel of the London Pneumatic Despatch Railway, has been finished from Holborn to Euston Station, a distance of two miles. The diameter of the tube is 4 feet 6 inches. A train of goods with an attendant was sent through the whole distance in five minutes.

### Pneumatic Despatch.

Papin has the credit of having invented the atmospheric mode of propulsion However correct this may he, it is certain that his ingenious contrivances for exhausting and compressing air led to little practical result. From his time the subject of working machinery by atmospheric pressure slept for about a century, when it was revived both in this and other countries. At one time it was thought that the locomotive system was in danger of being superseded by the atmospheric. Numerous experiments were tried, and several lines of railway were laid down upon the atmospheric principle. The alleged freedom from accident as compared with the locomotive system was the great stimulant, and Pinkus, Clegg, Samuda, and others, labored away to perfect the system. But they labored in vain, the great enemy to success was the ugly gap in the pipe which disturbed the vacuum by admitting air. To overcome the rupture of the pipe caused by the progress of the carriages much ingenuity was displayed in the valve arrangement, and, indeed, in every department. But the system proved radically defective, and sank into desuetude, like many other inventions on which a vast amount of time, money, and deep thought has been expended. Later times have witnessed a return to the principle, worked out, however, under very different conditions. In the pneumatic system the tube is enlarged, the carriage itself forms the piston, and, save at each end of the tube, there is no communication with the atmosphere; the vacuum is perfect. All this, like Columbus's egg, appears extremely simple now it is effected, and of course one wonders that the idea never occurred to those whose brains and pockets were alike ransacked to make the atmospheric principle of traction a success — The pneumatic system has been before the public in various ways for the last few years. Most people remember the experimental despatch line which was laid down at Battersea some four years since. Still better known perhaps is the short pneumatic railway for passengers at the Crystal Palace. The practical result of the experimental working of these two lines was manifested on Tuesday last, by the public opening of the first portion of the Pneumatic Despatch tube which will shortly connect the North-Western Railway at Euston square with the General Post office The line just opened is a mile and three quarters in length, and the cost is stated, at a rough calculation, to be some £30,000 or £35,000 per mile. From the Company's office in Holborn the tube runs southwards in a curved line under a portion of Seven Dials, thence it curves again and pursues a north westerly course under Tottenham Court road. It crosses over the Metropolitan Railway at the Euston road, and then runs to the Euston Station in a north easterly direction This route is somewhat circuitous, forming in effect three sides of a square, but it was necessitated by the Duke of Bedford's interference.— The route originally proposed was a direct line from the Euston Railway Station, underneath Woburn-place, to the Holborn Station of the company. A quarter of a mile of the tube was laid in this direction when the Duke forbade further progress on his estate. The works were, therefore, abandoned, and the line diverged, under the influence of the same obstructive that recently stopped the organ-pipes at the Floral Hall Working Men's Exhibition.

The straight portions of the line are formed of a continuous cast iron tube, the curved portions being constructed in brickwork. The sharpest curve is that near the Holborn Station, which is 70 ft. radius. The line passes beneath Seven Dials on a curve of 300 ft. radius, and on leaving the direction of Tottenham court road for the Euston Station a curve of 170 ft. radius occurs. The cast iron tube is of the horseshoe section, the internal dimensions being 4 ft. 6 in. horizontally and 4 ft vertically. The tube is cast in 9 ft. lengths each length weighing about two tons. In the experimental lines the rails are cast on the floor of the tube, but in the present case a wrought-iron rail is bedded on longitudinal timbers. The chief gradients on the line are 1 in 40, 1 in 45, and 1 in 60, some portions of the line being on the level. The average distance between the level of rails and the road level above is 9 ft. This depth enables the road to take a general position over the sewers and under the gas and water pipes, leaving each in the undisturbed possession of its own locality. Some slight obstruction was offered at the Euston road by the crown of the Metropolitan Railway tunnel. The difficulty, however, was speedily overcome, and the tube brought to its proper level by cutting a slice off the crown of the tunnel and laying the tube upon it, a cast iron trough being interposed to carry the tube. The trucks, which are about 10 ft in length, resemble in form the ordinary railway open goods wagons, the ends being raised above the sides and presenting an outline conforming to that of the interior of the tube. The edges of the truck ends are bound with an elastic medium, although a slight space is left between the trucks and the face of the tube, a perfect vacuum not being indispensable to the working of the line. It is found that no inconvenience arises from leakage, whilst, in the case of a close fit, the results of friction would prove prejudicial. The trucks are constructed of wood cased with iron; the wheels revolve in excavated circles, and are thus flush with the sides. Each truck weighs of itself about a ton, and its load is on an average one ton and a half. The trains which were run on the occasion of the opening consisted of four trucks, which with their loads represented a gross total load of ten tons. This weight was sent from Holborn to Euston with a blowing pressure of from 5 oz. to 6 oz. per square inch. It was afterwards drawn by exhaustion from Euston to Holborn at a pressure of from about 4 oz. to 5 oz., the time occupied in each journey being about seven minutes. In ordinary steady working twenty-four trains have been run in four hours, or equal to two hundred and forty tons gross load conveyed in four hours. The cost of working is found to be less than one penny per ton per mile; this includes engine fuel, and attendance, and all establishment charges. The low figure at which the prime cost comes out is highly favorable to the success of the undertaking in a commercial point of view.

The machinery by which the transit of trains is effected was designed and constructed by Messrs. James Watt and Company; it is placed in the rear of the Holborn Station, and consists of an engine having a pair of 24 in. cylinders, 20 in. stroke. A fan 22 ft. in diameter is geared at two to one with the engine, and is worked continuously, the alternate action of pressure and exhaustion being governed by valves. 100 revolutions of the fan will give 3¼ in. water pressure; 200 revolutions give 13 in. Pressures of ¾ lb and even 1 lb. are quite within reach. In ordinary the fan works at 160 revolutions, equal to 6 oz. on the square inch. The machinery at Holborn is arranged for working both sections of the line, so that when the construction of the section from Holborn to the General Post Office is completed, trains will be drawn, by exhaustion, from that point and from Euston-square to Holborn simultaneously. Arriving there they will be placed each in the tube the other has just quitted, and will then be sent by pressure to their respective destinations, constant communication, if necessary, being thus maintained between Euston and St. Martin's le-Grand. The works on the Post Office line have at present only reached as far as Ely place, Holborn, but they are being vigorously pushed on. It is of course well known that the pneumatic line is constructed solely for the transmission of parcels and mail bags; nevertheless a worse method of transit might be devised for passengers. As regards steadiness, a run on a ballast engine would contrast unfavoraoly with a trip through the pneumatic despatch tube, as we experienced it on Tuesday. True, the trucks do run rather hard, but this is owing to the fact that no springs are interposed between the axles and the body of the truck. Although the journey to Euston was made in total darkness and without a knowledge of the points at which curves occur, they were easily recognized by the tilt given to the truck by the super-elevation of the rail. On the return trip we had the advantage of a lantern, and, as well as the rapid transit would permit, were enabled to examine the work, which showed very perfect finish and sound construction. The joints were cleanly made, and the junctions of the brickwork and iron tube carefully executed. The only inconvenience experienced was at the commencement and termination of the journeys, especially at the latter, when a sensation is felt in the ears very similar to that which occurs on descending in a diving bell. The time occupied in the return journey from Euston to Holborn was just eight minutes, which was rather in excess of the time taken by the train when laden with ballast only.— But in addition to the ten tons gross load to be moved, there was now the weight of some eight or ten passengers, who thus practically illustrated their confidence in the efficiency of the system.

Although at present only two lengths of the line are laid down, there can be little doubt that others will follow as soon as the commercial success of the first is proved. The company possess powers under their act to lay down pneumatic tubes at any point within the jurisdiction of the Metropolitan Board of Works, and their scheme is to construct lines between the ten district post-offices and the General Post Office. They further propose to construct lines between the different railway termini and goods depots in London, connecting with these lines the principal London markets and other important points. To effect this some thirty five miles of tubing would be necessary, for the laying of which as already observed, no further parliamentary powers are necessary. The Waterloo and Whitehall Railway will be constructed upon the same general principles as the foregoing, only that, being intended for passenger traffic it will of course be on a much larger scale, and the details of the carriages will be differently worked out The inconveniences to which we have referred will be absent on this line, inasmuch as the carriages will be closed from all contact with the outer air except so far as is necessary for ventilation. Lamps will light up the gloom of the tunnel, and

springs will render the trip agreeable. In our issue for the 16th of June last we gave the detail particulars of this railway, and we recently announced the commencement of the works. This line is engineered by Mr. W. T. Rammel, who is also joint engineer with Mr. Latimer Clark for the Pneumatic Despatch. Before concluding we would observe that the Battersea experimental line was transferred about three years ago to Seymore street, where it has been and now is conveying mails between Euston-square Station and the north-western district post office in Eversholt street The experiences of Tuesday last form the basis of a strong expectation that at no distant day the pneumatic despatch system will have extended its operations in all directions under London. That it is an engineering success none can deny, and judging from circumstances we may safely predict its commercial prosperity.—*London Mechanic's Mag.*

### Cincinnati the First Manufacturing City of the Union, in Point of Population.

It will be a matter of surprise to those who have not made special examination of the subject, to know that Cincinnati now ranks, as a manufacturing city, the first in the Union. We have hitherto been regarded as the great metropolis of pork, and many are the jests that have been thrown at us on account of our porcine greatness We have been taught to regard Lowell, Pittsburgh, Brooklyn, &c., as *the* manufacturing cities of the country. But the recent report of the Secretary of the Interior, shows that these fall far short of our city, and places Cincinnati next after New York and Philadelphia in point of productions and capital employed in manufacturing. In response to a resolution of the House of Representatives, the Secretary of the Interior, a few days ago, communicated a list of the cities of the United States, with the statistics of their manufacture, including those having a population of ten thousand inhabitants and upwards. We take the report from the Chicago *Republican* of the 26th ult. It includes 102 cities, beginning with New York and ending with Newport, Ky. The total capital employed is $417,129,234; hands employed, males, 410,920; females, 147,000; value of products, $874,934,827; New York stands first in the list; capital, $61,212,757; males employed, 65,483; females, 24,721; value of products, $159,107,360 Philadelphia employs a capital of $73,318,885; male operatives, 68,350; females, 30,633; value of products, $135,979,177. Cincinnati is third in order; products, $46,000,000; capital, $17,000,000 in round numbers. Boston, products, $36,000,000; capital, $13,000,000. The other principal cities produce as follows: Brooklyn, $34,000,000; Newark, $22,000,000; St. Louis, $21,000,000; Baltimore, $21,000,000; San Francisco, $19,000,000; Lowell, $18,000,000; Providence, $15,000,000; Louisville, $12,000,000; Richmond, $12,000,000; Pittsburg, $11,000,000; New Bedford, $11,000,000; Chicago, $11,000,000; New Orleans, $10,000,000; Manchester, $10,000,000; Rochester, $10,000,000; Troy, $10,000,000.

But if we make a comparison of amount of produce and capital with the number of inhabitants, it will be seen that Cincinnati is, in fact, the *first* manufacturing city of the Union In round numbers, we suppose the three cities of New York, Philadelphia and Cincinnati to contain a comparative population as follows: New York, 1,000,000; Philadelphia, 750,000; Cincinnati, 250,000; that is, New York contains four times as many, and Philadelphia three times as many inhabitants as Cincinnati.

New York produces in manufactures, $159,107,369 and employs a capital of $73,318,885.

Philadelphia produces $135,979,177, on a capital of $73,318,885.

Cincinnati produces $46,000,000 on a capital of $17,000,000.

A calculation will show that in proportion to the inhabitants, Cincinnati produces $24,892 531 more than New York, and about three millions more than Philadelphia.

A further examination of the report will show that Cincinnati produces annually in manufactures,—

$10,000,000 worth more than Boston.
$12,000,000 more than Brooklyn.
$24,000,000 more than Newark.
$25,000,000 more than St. Louis.
$25,000,000 more than Baltimore.
$27,000,000 more than San Francisco.
$28,000,000 more than Lowell.
$31,000,000 more than Providence.
$34,000,000 more than Louisville.
$34,000,000 more than Richmond.
$35,000,000 more than Pittsburg.
$35,000,000 more than New Bedford.
$35,000,000 more than Chicago.
$36,000,000 more than New Orleans.
$36,000,000 more than Manchester.
$36,000,000 more than Troy.
$36,000,000 more than Rochester.

The figures of the Secretary of the Interior are based, we presume, on the returns of the Internal Revenue office, which are as correct as perhaps can possibly be reached.

We confess ourselves surprised at the result, great as were our previous ideas of the manufacturing wealth of our city. Here, after all, is the true greatness of Cincinnati, and must ever be from her natural position. She not only commands all markets, in which to dispose of her produce, but is so situated as to reach all points of supply. With the Ohio river and its tributaries she reaches one hand and grasps the coal fields, iron mines, oil wells and forests and salt wells of Pennsylvania, Virginia, Kentucky, Tennessee and New York; and with her canals, rail roads and lake navigation, the rich supplies of the forests of Indiana, Michigan, Illinois, Canada and the farthest North. All the material she wants for the workshop of her mechanics is within her reach in great abundance, and at as reasonable cost as at any point on the continent.

What is the result? Almost every article which can be made out of wood, iron or metal of any kind or fabric, from any production of nature is here made, not by a single individual, but by numerous competitors in the same line, each striving to produce an article superior to the other, and at a lower price, or to furnish to customers on more advantageous terms. As a natural consequence, where this great competition is constantly going on, is the best place for the user or consumer to buy, and where the stock out of which to manufacture these articles in such great abundance, the supply will fully equal the demand We need not, indeed we could not, enumerate the one-thousandth part of the articles manufactured here. They can only be embraced in the statement that whatever is necessary to be used in navigating the rivers, oceans, lakes, to construct or run railroads, mills, manufactories, to till the soil, mine the ores, cut down and use the forests, build your houses, equip them from garret to cellar, clothe or feed the inhabitants, or provide articles of necessity or luxury for them in every department of life, is here manufactured and can be purchased at our various manufactories and warehouses in as great abundance, and on as fair terms as any place in the world.—*Cin. Jour. Com.*

### Growth of the Great Cities of the West.

The Government official statistics of the manufactures of the large cities in the United States, which were published in our dispatches on Friday, place Cincinnati third in the list in point of invested capital and products,—New York being first and Philadelphia second. The annual products of the manufactures of Cincinnati are set down at forty-six millions in value, and the invested capital in manufacturing fixtures and machinery at seventeen millions. The products of the manufactures of St. Louis are twenty-one millions a year; and those of Chicago are set down at eleven millions.

Manufactures imply actual fixed capital, a population of skilled laborers, and an established trade. We know of no other three elements of the growth of cities so substantial, reliable and expansive as these, nor so potent in drawing all the other elements of growth. Capital thus profitably invested is continually accumulating and expanding in new investments Such an industrial population is continually increasing by attraction and propagation. With these it would be very moderate to say that the general trade will grow in proportion, for commerce grows out of, and naturally expands upon such a foundation.

Ours are not a public spirited people in the way that incites them to public enterprises, or makes them anxious on the subject of the general growth of the city, or jealous in regard to its "supremacy" to borrow a term from a town where this supremacy is a subject of much concern, and which imagines a tremendous rivalry with Cincinnati, though we cannot see how we interfere in the least. It is hard to interest our people in a public enterprise that would give Cincinnati the supremacy in the trade of a great territory in the most productive part of the South. It would be still more difficult to interest them in the more glittering and vague subject of the supremacy of this as compared with any other city in the West.

A city population who turn out manufactured products to the amount of forty-six millions a year, and carry on the trade which belongs to such a production and to a commanding commercial position, are too busy to spend their time in crying to each other the greatness and supremacy of Cincinnati. And, naturally, substantial growth like this does not suggest the necessity of windy means to keep it up or increase it Our people are too busy in their private affairs to devote themselves to this public trumpeting, or in fact to take any interest in it Their occupation is too incessant If they had an ice embargo on their greatest trade for half a year, they might have more leisure for such public spirit.

We doubt if the real and more substantial elements of the growth of interior towns are fully appreciated. The transhipment of rough produce, and the return of all the articles of consumption, is the first rough trade of a new country. As its condition becomes more settled, the production will change to articles which will not so nearly consume themselves in transportation to market, or the products will be turned into more valuable commodities before sending to market; and on the other hand the common and bulky implements and

articles of consumption will gradually be made in the country.

We do not undertake to say that this natural operation will result in a diminution of the trade of the interior places of transhipment, but it will change their trade. There is no kind of trade so primitive and wasteful as the exhausting of the soil of a new country in crops, to pay transportation from one to three thousand miles to market, to bring back the remnant in articles of the farmer's consumption. Only the virgin soil of a new country can support this wastefulness. As soon as its extraordinary fertility is spent, necessity forces a change of production, or the soil ceases to be profitable for cultivation. Under this operation the center of production is continually traveling westward.

In the popular discussions of late in the Northwest, of measures of relief from the inordinate cost of transporting their products to market, we notice it stated that in the region whose products reach a market by the various railroads to Chicago and thence by lakes and canal to New York, it takes what the farmer receives for three bushels to pay the transportation of one bushel to New York. The return trade, under such conditions, must be small. We doubt if this trade is a substantial foundation for great commercial growth, and we hope it will change into forms that will make a more reliable basis for the trade of the towns, and will be less oppressive to the producer.

The growth of a manufacturing town is a general benefit. Instead of living on the country, it furnishes it a market, reciprocates with it by furnishing its machinery, implements and articles of consumption at cheaper prices, turns its surplus products into things of wider demand, and more capable of transportation, and in all ways each mutually benefits the others. And as manufactures are at once the most substantial growth of a town, and the most beneficial to the country, so they are the most difficult to create. Their growth is from small beginnings by the process of generation. Speculative excitements and transient investments can do nothing for them, but are all inimical.

Neither can the manufacturing business be built up by blowing. We have observed the public press in towns of large commercial business in the shipment of produce, but of slow growth, laboring, so far back as we can remember, to create manufactures by the force of editorial writing, without any appreciable result. Not only the investment of capital in manufactures is at first timid and slow, but the growth of a population of skilled laborers is slow. But as the growth of manufacturing is by generation and attraction, when it has become a great establishment the increase is sure and accelerating. It is substantial for all time, because it benefits the whole country instead of exhausting it. And it is the best basis for all public enterprises to extend trade.—*Cin. Gazette.*

☞ In a paper on weldless tires, read before the British Institution of Civil Engineers, by F J Bramwell, C E, we find a full description of the manufacture, according to Bodmer's principle, of these articles. In brief, this is as follows: A helical coil of bar iron is made up welded, and rolled into a tire of double the thickness and half the diameter required in the finished article. This is then worked down to the required form in the continuous rolling machine adapted for such operations.

### Death of the Rev. President Nott.

The death of the Rev. Eliphalet Nott, D. D., President of Union College, to whom an ample tribute was paid in our columns yesterday, took place at Schenectady, on Monday, Jan. 29, after a protracted course of illness and infirmity, incident to the advanced age of ninety-three years. He was born at Ashford, Conn., June 25, 1773. Without the advantage of a previous college education, he studied divinity in his native county, and at the age of twenty-one devoted himself to the work of a missionary in the central part of the State of New York. His first settlement as a pastor was over the Presbyterian Church in Cherry Valley, from which post he was called in two or three years to a prominent position in Albany. In 1804, he was chosen President of Union College, which institution has largely reaped the benefit of his zeal, sagacity, practical skill, and popular influence. Under his administration, it emerged from poverty and obscurity, to wealth and honor, and is now signalized by a long list of eminent men in every walk of life to whom it has been a kind and watchful intellectual mother. Dr. Nott was an earnest advocate of the Temperance cause, to the progres of which he ably contributed by his "Lectures on Temperance" (1847). Of his numerous writings, few have seen the light except in the form of occasional addresses, and his work entitled "Counsels to Young Men." He was deeply interested in the science of thermotics, and obtained numerous patents for various applications of heat to economical purposes. The reputation of Dr. Nott was due to a certain native shrewdness of mind, fertility of suggestion and resource, and an unfailing good sense rather than to extensive learning or profound thought. He was neither a scholar nor a philosopher. In each of these respects, he was very far surpassed by several of the eminent men who compose the staff of education in Union College. But in keenness of perception, working aptitude and alertness, and command of expedients, he had few equals. His eloquence was remarkable, formed on no model, matured by no training, but presenting several striking characteristics of the great French preachers of a former age. His style was wholly unique in the history of American pulpit oratory. As he had no prototype, he has had no rivals, nor successful imitators in his peculiar kind of eloquence.—His diction was fragmentary, interjectional, and abounding in original and unexpected images. His short, sparkling, explosive sentence had the force of a musket-shot. Pointed and incisive, his epigrammatic phrases cut down to the very depths. He loved to illustrate his subject by high-wrought pictures, rather than to sustain it by weighty arguments. But in his kind, he was a master, the like of whom will not soon be seen again.—His life was his best logic, adding grace to his own persuasions, and fortifying his neighbor's creed, by its purity and benevolence.—*N. Y. Tribune.*

### To Railway Companies and Railway Travelers.

We would suggest, in order to prevent confusion and unnecessary delay which often occurs in getting on and off the cars at stations, that the railway companies have a placard at every station, requesting travelers who take the train to enter at the forward end of the car, and those who are leaving to make their exit from the rear end—the end most distant from the engine. As now practiced, some are attempting to get out, while others are blocking up the passage in their efforts to get in; and often passengers find it difficult, where trains stop but a moment, with numbers in waiting, to get off and on in safety. Should the above hint be adopted, this confusion on the platform would be avoided. Nor would this be the only practical benefit accruing from this rule, if once well established. People looking for friends on a train would always know at which end of the car to seek for them, and if it were understood in which car they were to ride, first, second, or third, they would be sure to find them with little delay; and in a dark, and perhaps stormy evening, this would prove a great advantage.

### New Rails for Street Railways.

There are obvious objections to the forms of the rails used on the street or horse railways. In more or less degree they are all obstructions to the use of the streets by common carriages, and are dangerous too, as has been proved by the numerous accidents that have happened upon them. The lighter and large wheeled pleasure carriages are often broken by the wheels being caught in the depressions of the rail, when attempting to turn suddenly from the track, whereby the wheels are broken, horses thrown down and the occupants of the wagons thrown to the ground. Every form of these rails are more or less open to objection, and the public will welcome any improvement that will render these tracks more safe and less obstructive to common travel. Outside of the danger caused by these rails, they are very destructive to road vehicles increasing the wear and tear a very large percentage, and gentlemen who use their own carriages for daily driving into and out of the cities, find the expense of repair very largely increased since the introduction of the street railway,—from 25 to 50 per cent. To the end of remedying these troubles and doing away with these objections, our mechanical and inventive friends should give the subject a little more attention. An English invention or arrangement of rails and car wheels may furnish a hint in the right direction. The rail is rolled in a crescent form and the top is left even with the pavement, the wheels being cast concave on their tread, to fit the rails. The rails are laid upon longitudinal sleepers resting upon cross ties, and the pavement is fitted up to the rails, so that no larger opening is left on each side of the rail than there is between the different blocks forming the pavement. With proper care this track can be so arranged that street vehicles will suffer no impediment in crossing the tracks at any angle, while the convex rail and concave wheel are found amply sufficient to keep the street cars in their proper line and position. Our readers perhaps may like to know the arrangement of the superstructure. The longitudinal sleeper upon which the rail lies, rests upon a cross-tie; the top of the sleeper is convexed, and the rail fits on to this like a cap, the form of the sleeper allowing the water to run off rapidly. At the rail joints a curved iron plate identical in form is placed under the rail, giving it the proper rigidity, and the rails are then fastened to the sleeper by screws. Whatever may be the defects of this plan in practice, it certainly has some merit, in that it presents but very slight obstruction to common road vehicles, and it should receive

some attention. Our horse or street railway system is a great public convenience, and everything that can be done to remedy its defects and render it less objectionable to other systems of travel is well worthy consideration. The above plan seems to recommend itself from the fact that it is not unreasonably expensive; that it furnishes a good substantial roadway for the street cars, and possibly admits of the use of a lighter rail than we are now using with no decrease of efficiency.—*Am. Railway Times.*

### The Imperial Mexican Railway.

The directors of the Imperial Mexican Railway Company report that most satisfactory progress has been made in completing the working plans and sections and laying out the line, and also by the contractors in its construction. Colonel Talcott has just returned from a general inspection of the entire line, and reports that nearly all the plans were in the hands of the contractors. Between the Barranca del Metlac and Orijava, a distance of ten and a quarter miles, the earthwork were completed, with the exception of a heavy rock cutting adjoining the Barranca, which is in active progress. From Orijava to the head of the Encinal Valley, and thence to the end of the Maltrata Valley, a length of thirteen miles, the line is laid out, with the exception of sections of 19 and 20. The works on this portion of the line were commenced on the first of November, and a large force of men is now employed on the earthwork and masonry. On the Maltrata division, which embraces the great Orijava incline, twenty-three miles in length, sections 1 and 2, and others, are under construction. From Boca del Monte to the city of Mexico, a distance of 155 miles, the setting out of the main line is completed. The contractors are at work on the eight miles from Santa Isabel, in the direction of Puebla. From Santa Isabel northwards to Molina and San Diego the line is set out. The total quantity of rails shipped to this date is 8,065 tons, and the quantity manufactured 9,224 tons, with the corresponding amount of fastenings. Contracts have been entered into for the supply of locomotives and rolling stock, which will be of the best construction, embracing every improvement which the experience of English, Indian, and European railways justifies. All the iron roofing and other materials, tools and machinery for the stations, workshops, &c., are in course of construction. The line from Mexico to Puebla Jonction will be completed and ready for traffic by the end of May, and to the city of Pueola by August. The entire line from Vera Cruz to Mexico and Puebla will be completed in the time named in the contract.—*R. R. & Mining Reg.*

### The Decline in Stocks.

Railway securities have recently been unsettled in the cash market. There seems to be an intention in a large party of operators to depress their values at the present moment so that we hear from them of a temporary decrease of receipts, doubts as to dividends earned, and various other stories of a depressing character. Yet notwithstanding we perceive when the opportunity comes, these same parties can effect a sudden rise of 8 or 10 per cent,

The truth is that all the street stories are to be received with caution. If parties interested will but examine the tables, they will be much better able to judge of the business, and values of these railway companies, than they can in any other way, and with a much greater certainty. The railway interest of this country is a sound one, the companies that have not had their roads destroyed by hostile armies, have been able to reduce their indebtedness and are out of danger; their annual receipts show an increase, in some cases very large in amount; while from the South we learn with satisfaction that the companies there are reconstructing with great vigor, and business is rapidly reviving. Holders of railway securities may therefore as a general rule hold on to their investments with confidence; and should remain unmoved by the reports of the street, or the combinations and corners announced there. Our railway system is just as sound as ever it was, and the condition of the roads just as stable; a temporary depression in the business of any of them being no more destructive to their general prospects, than temporary derangement of the stomach would be to a man in full health. For the last year the earnings of our railways, have exceeded by very considerable sums those of the preceding year. Omitting the earnings of December those of the eleven months, exceed those of the whole of the previous year.—*Amer. R. R. Jour.*

### More Important Railroad Consolidation.

*A New and Great Through Railroad Route to the Mississippi River.*

The plan inaugurated by Sir Morton Peto and his friends connected with the Atlantic & Great Western Railway Company to open in connection with the Reading, Catawissa and Morris & Essex Railroads an air line to the west, from this city and Philadelphia, has waked up the parties largely interested in the Pennsylvania Railroad, to protect its interest in securing a direct connection with the Mississippi river at Warsaw, and Keokuk; and we are informed that parties largely interested in the stock have in connection with the stockholders of the "Pan Handle" Steubenville & Indiana, and Columbus & Indianapolis Railroads formed a company to built a road from *Union*, on the last company's road direct to Logansport, Indiana, a distance of 91 miles, and there to connect with the Toledo, Logansport & Burlington, and the Toledo, Peoria & Warsaw Railroads to Warsaw and Keokuk on the Mississippi river. The road in Indiana is already under contract, and is to be completed and in running order next Jan.; and it is probable it will then be consolidated with the Toledo, Logansport & Burlington Road, forming one company in Indiana, a distance of 152 miles.

The parties interested in the enterprise have already secured the control of the road west of Logansport by purchase of its bonds, and stock, and the following gentlemen were elected directors at the annual meeting a few weeks since, viz: R. D. Barclay, J. H. Bradley and S. M. Waln of Philadelphia; W. D. Thompson and J. F. Seeley, of New York; Gov. Wm. Dennison of Washington; and Benjamin E. Smith of Columbus, Ohio.

These gentlemen are well known railroad capitalists and are all more or less largely interested in the connecting lines from Indiana to New York, and their names are a sure guarantee that the work will be vigorously pushed towards completion.

The Mississippi & Warsaw Railroad Company owing the line from Warsaw to the Illinois River have recently, in view of opening the "Great Midland Route," merged and consolidated with the Toledo, Peoria & Warsaw Railway Company, which connected at the state line and terminated at Peoria under the name of the Toledo, Peoria & Warsaw Railway Company, making a continuous line across the state, a distance of 230 miles, and crossing the Chicago, Burlington & Quincy Railroad at two important points, and also the Illinois Central Railroad on the main line, and branch at El Paso and Gilman, and the Chicago & Alton Railroad at Chenoa, fifty miles from Peoria.

The consolidated company have already put under contract the "Gap" between Peoria and Carthage, on the Mississippi & Wabash line, and under the patronage and influence of the roads east of Illinois, (which is to form and complete the "Great Midland Route,") it is expected that the Road will be completed as soon as the Indiana Company make the connection at Logansport. The following gentlemen: Charles L. Frost, Zeno Secor, James W. Smith of New York; Hon. John B. Brown, Portland, Maine; Henry H. Ill, E. P. Buell, Warsaw, Ills.; H. B. Ten Eyck, Keokuk Iowa; John W. Cheney, and W. H. Cruger, of Peoria, Ills; all of whom are well known in New York and the West, were recently elected the managers of the Illinois consolidated road; and being men of wealth, and of great practical business experience, and having very large personal interest in the property, the public may be assured that they will not be behind hand in their part of the work, and that the "Great Midland Route" will be opened for through business in fifteen months from this time. The distance from New York to Warsaw and Keokuk by this route is as follows, viz:

| | |
|---|---|
| New York to Pittsburg....., .....431 | miles. |
| Pittsburg to Columbus, *via* Pan Handle.. .....191 | " |
| Columbus to Union ..... 86 | " |
| Union to Logansport ..... 91 | " |
| Logansport to Warsaw.....291 | " |
| 1,190 | miles. |
| By the Route *via* Chicago to New York the distance is.....1,214 | " |
| Making.....124 | " |

—miles difference in favor of the direct route from New York to the Mississippi River.

In order to inaugurate the new line at once, we learn that the Pennsylvania Railroad Co., and the other companies, interested in this project, will on the first proximo put on a line of through cars each company furnishing its quota. Until the completion of the road from Union to Logansport, the route will be *via* the Chicago & Great Eastern from Richmond to Logansport.—*Am. Railroad Jour.*

### The Pacific Railroad.

The Government Directors, Commissioners, and Engineers of the Pacific Railroad, who for some days past have been in session here, adjourned to day. They adopted rules which are to be considered as a standard for the construction of the road, and adopted measures to facilitate the steady progress of the work. Reports were read from the West given assurance that the utmost energy was being used to forward the enterprise, and the great work much desired by the government and the people was progressing rapidly and surely to its ultimate completion.

### Mansfield's Elastic Frog.

This invention, due to the genius of Mr. Willis Mansfield, Road Master of the New York & New Haven Railway, after long trial seems to have established its character as a most efficient element of a good railway track. It has been in use now for some seven years on the above road with the best results. In its construction Mr. Mansfield has recognized the value of the elastic principle which renders the Griggs Driving Wheel so superior to all others. The frog is composed of layers of wrought iron, rubber and wood, bolted together in compact form, with steel point and wings, combining the greatest possible strength, and doing the least possible damage to the passing wheels. The layer of rubber takes up the hard shock of the wheels so noticeable in passing the common frog, and makes the passage of the train much easier, and prevents the hard destructive jarring of the machinery. The prevention of this hard pounding of the wheels when passing rail ends or other inaccuracies of the track, is a matter upon which we have had a good deal to say at different times, and Mr Mansfield's arrangement of the frog is, we should think, admirably calculated to subserve the purpose. The inventor claims that not only is it easier for the trains creating less disturbance and wear and tear of rolling stock, but that it will many times outlast the common frog, while it can be furnished ready made to fit any track at much less expense than the common frog. We understand that in no instance has one of these frogs been broken or got out of repair, although they have been on different roads from three to seven years in the very hardest and most exposed portions. On the New Jersey Central Railway, where some fifty coal trains are run daily, one of these frogs has been in use some three years without appreciable wear, and we believe this is in accord with the general evidence of their use elsewhere.—*Am. Railway Times.*

### The Elevated Railway.

Among the eminent citizens who have, upon careful examination, given their hearty assent to the project of an Elevated Railroad between the upper and lower wards of our City, the names of George Quintard, Horatio Allen, Miers Coryell, and others, are prominent. The following letter from Mr. Allen ought to be conclusive as to its advantages and its practicability:

New York, Jan. 19, 1866.

I have examined R. Montgomery's plan of a passenger railway for streets, having one track on one side of the street, and the other on the other side, placed sufficiently high to provide for the cross streets; the structure being of wrought iron of such form and combinations as to afford adequate support and not impair the light in buildings adjacent; the transportation to be effected by means of engines of an appearance and noise not to alarm the horses in the streets, and I am of opinion that the plan is entirely practicable and that the proposed structure can be readily operated.

HORATIO ALLEN.

—We understand that this Aerial Railway is to have two tracks each way; the higher to be used for through travel only, at thrice the speed now attained by street railways; while a light and graceful arch, spanning the street at intervals, is to connect the tracks on either side of the main roadway.

### Northern Pacific Railroad Meeting.

Boston, January 31.

A meeting of capitalists and merchants was held in this city, at the rooms of the Board of Trade, to consider the interests of the Northern Pacific Railroad.

Speeches were made by Edward S. Tobey, who presided, ex Governor Smith, of Vermont, the new president of the company, Hon. John F. Driggs, M. C., of Michigan, Hon. E. D. Holbrook, M. C., of Idaho, Captain Mullen the celebrated explorer and engineer, and other gentlemen.

The policy of the company was announced to be the immediate construction of about 700 miles of the road, to connect the waters of Lake Superior with the Mississippi and Yellowstone Rivers, proceeding thence to the navigable waters of the Columbia, by which steam communication will be opened. It is proposed that this work shall be completed within three years.

### Liabilities of Street Railroads.

An interesting case, which resulted in the Brooklyn (N. Y.) City Railroad Company being assessed in $2 500 damages, was tried before the Supreme Court in that city last week. A boy named Sheridan, aged nine years, paid the half fare required of children of his age, and took his seat in a car. On adults entering, and the car becoming crowded, the driver made him give up his seat, and he accordingly sat down on the side of the front platform. He was accidentally pushed therefrom by another boy, and the wheels running over him, injured him so badly that he died. His father brought suit against the company. The defense claimed that the boy having only paid half fare was not entitled to a seat, and also that the accident was the result of his own carelessness. Judge Gilbert charged the jury that, having paid the amount of fare demanded from him, the boy was entitled to a seat, and the conductor had no right to eject him from it; and that if they found that the accident was caused by the act of the conductor in ordering the boy to leave his seat, without any fault on the part of the latter, they should find a verdict for the plaintiff, which they did.

### Mexican Railroads.

We are informed that the track-laying beyond Guadalupe on the New Line has commenced and is now progressing finely. Among the sturdy, intelligent Englishmen who came with Mr. Lloyd, none excel Mr. Jacob Camming in energy, practical skill and industry. He is now engaged on the New Line, and he assures us that the utmost efforts will be used to complete this road as soon as possible.

It is asserted that the project of the horse-car railroad between Vera Cruz and Puebla, passing by Jalapa, Perote and San Juan de los Llanos, has been approved by the Emperor.

The road between Vera Cruz and Jalapa must be completed in January, 1867, and to Puebla at the end of the same year.

☞ By the Bessemer process, steel is being manufactured and worked into rails, &c., at the Crewe Locomotive Works, a double steam hammer being used in the forging, and the spectroscope employed as a means of observation, and prospectively as a guide in the process of conversion.

### Liquid Explosive Compound.

In the *Mechanics' Magazine* for August 11 account was given of some Swedish experiments with that highly explosive compound, nitro-glycerine, which Mr. Nobel, a Swedish engineer, is endeavoring to bring into use, instead of gunpowder, for blasting purposes. The same "blasting oil," as Mr. Nobel calls it, has since been experimented with in Cornwall, with very satisfactory results. It is an oily fluid, of a light yellow color, and of 1.6 specific gravity. It consists of three atoms of nitric acid, or 3 N $O^5$, combined with one atom of glycerine, or $C^6$ $H^5$ $O^3$, so that its ultimate composition may be represented by $C^6$ $H^5$ $O^{18}$ N. It bears the temperature of boiling water without explosion or injury, but explodes at about 360° Fahr. The changes which occur during explosion, convert each volume of it into 469 volumes of carbonic acid, 554 volumes of steam, 39 volumes of oxygen, and 236 volumes of nitrogen, being a total of 1298 volumes of gas for each volume of the liquid oil. The gases produced by the explosion of gunpowder measure, when cold, only 250 times the bulk of the gunpowder exploded, so that, supposing the gases evolved to be in each case at the same temperature, nitro-glycerine would thus be five more effective than its bulk of gunpowder. A great deal more heat, however, is generated by the explosion of nitro-glycerine than by the explosion of gunpowder, and the gases produced by the explosion of the former are therefore in so much higher a state of tension than those produced during the explosion of the latter that the new agent is thirteen times more effective, bulk for bulk, and eight times more effective, weight for weight, than the old. The use of nitro-glycerine in blasting, therefore, enables thirteen times more disruptive force to be applied, by means of a hole of a given size, than can be brought to bear by means of a bore of the same dimensions when gunpowder is used, and one result of its substitution for gunpowder, for blasting purposes, is thus a very great economy of labor. When there are rents in the rock in which the bore is made, the advantage of nitro-glycerine over gunpowder is greater than thirteen to one, amounting, indeed, to between twenty and thirty to one, by reason of the explosion of nitro-glycerine being so much more rapid than that of gunpowder that the force of its explosion is not appreciably diminished by fissures in the bore which would diminish the effective force of an explosion of gunpowder by fifty per cent. For the same reason, "tamping is never required, a shaft of loose sand being sufficient in all cases. Hence, accidents in charging are impossible, besides the saving in time." Other advantages of nitro-glycerine are that, "being insoluble, discharges under water, or in water-carrying rocks, may be effected by it without cartridges; and, as the blasting oil can only be exploded under certain conditions, and by means of igniters manufactured specially for the purpose, its storing and transport involve no danger." Curiously enough, contact with fire is not sufficient to ignite it at ordinary temperatures, neither is contact with phosphorus, or even with potassium. The chief danger in its use is from its intensely poisonous qualities, but these can be effectually guarded against without much trouble. At present, nitro-glycerine is more costly than gunpowder in about the proportion which it is more effective, so that, for charges of equal force, nitro glycerine and gunpowder cost about the same. The saving of labor and time which results from the use of the former, however, renders it by far the more economical agent of the two.—*Lon. Mech. Mag.*

## RAILROAD ITEMS.

Russian Railways.—The Russian Invalide gives the following statistics:—The lines constructed by the Great Railway Company have an aggregate length of 1,617 wersts (about 1,080 English miles), and cost 169,183,420 silver roubles, thus averaging 104,628 roubles per werst. The Riga & Dunaburg Railway (254 wersts long) cost 13,561,131 roubles, or 66,476 roubles per werst The Moscow & Ryasan Railway (185 wersts in length) cost 15,000,000 roubles, or 81,581 roubles per werst. And finally the railway connecting the Wolga with the river Don (73 wersts in length) cost 4,591,748 roubles, or 62,240 roubles per werst.

The Omaha Republican of the 27th ult. says that authorized parties from the Chicago & Northwestern railroad are now in communication with the Boards of Trade of Council Bluffs and Omaha with reference to a subscription to pay the increased expense of shipping railroad iron up the Missouri river to lay the railroad track from these points forty miles eastward, to meet the track of the same road building westward from Boonsboro, Iowa. The proposition to build this forty miles of road eastward is one great importance to the interests of both cities.

The South Bend Register says, the Cincinnati, Peru & Chicago Railroad Company has purchased the road from La Porte to Plymouth, which is to be put in first class condition, and the twenty miles of new road from Plymouth to Rochester will be finished by midsummer, when trains will run from Rochester to Chicago, as an arrangement has been made for using the track of the Michigan Southern & Northern Indiana Railroad from La Porte.

Col Innes, General Superintendent of the Nashville & Chattanooga, and Nashville & Northwestern Railroads, was at St Louis on the 4th inst, and arranged with the St. Louis, Cairo & Johnsonville Packet Company, by which the trade of Nashville and Chattanooga, and the rich country south and east of those points, will be drawn to St. Louis by inducements superior to any beretofore presented.

The Mauston (Wis) Star says: Our people have just learned how to collect debts due from the Milwaukee & St. Paul railway company. The other day when the "pay train" went over the road our Sheriff got into the paymaster's car and levied on the funds. There was a lively time for a few minutes but the Sheriff kept the money.

Big Business.—The amount of bills upon freight forwarded from this station on the Atlantic & Great Western Railway during one week of January was over eleven thousand dollars. The total of freight forwarded and received during the month was over eighty thousand dollars Pretty good for a six months town!—*Reno Times.*

The Lower House of the Kansas Legislature has rejected the bill to give 500,000 acres of land to certain railroads.

A new hill has been introduced into the Senate, giving the Leavenworth, Lawrence & Galveston Railroad 100,000 acres, and the Lawrence & Pleasant Hill Road, 100,000 acres.

The articles of incorporation of a new railroad Company, called "La Crescent, Rochester, and Yankton Railroad Company," has been filed with the Minnesota Secretary of State. The object is to construct a railroad from the Mississippi river through the southern tier of Minnesota counties, to the Missouri river. The capital is $10,000,000.

The last rail on the Augusta & Savannah Railroad was laid at 6 P. M, on the 31st, and the trains ran between the two cities. The large body of workmen now employed will be put on the main track of the Central, and there is but little doubt of its completion in the month of May.

The Portmouth correspondent of the Boston *Advertiser* says. some conductors on railroads in that State have been living at the rate of several thousands a year on a salary of $89 a month, and rapidly accumulating property. The stockholders smelt a rat, and detectives set a trap and caught them.

A meeting was held in Frederick, Md., on the 15th inst., for the purpose of maturing measures for building a railroad from the District of Columbia to the Pennsylvania line, by way of Frederick. A committee was appointed to memorialize the Legislature for the passage of an act of incorporation.

There are now about thirty steel works in the United States. The total production of all kinds during the past year amounted to about 18,000 tons, as follows: Massachusetts, 460 tons; Connecticut, 180 tons; New York, 2,500 tons; New Jersey, 3,700 tons; Pennsylvania, 11,500 tons.

The high mountain barrier between Norway and Sweden is about to be pierced by a railway tunnel, connecting the railway systems of the two countries, making direct steam communication between Stockholm and Christiana.

The machine and carpenter shops of the Allegheny Valley Railroad, at Pittsburg, were burnt on the 5th inst. Eleven engines were more or less injured, leaving but three for use. Loss $200,000. No insurance.

A brass made of 60 parts copper, 38 parts zinc and 2 parts iron, may be forged at a red heat, and will support a "breaking weight" of 27 tons per square inch. This has been used with success for bolts in the fire-boxes of locomotives.

Railroads are multiplying in Europe to such an extent that it is said that the only district were the pedestrian can hope to long escape them is the Tyrol, the mountain recesses of Switzerland and Norway, and Sweden generally.

The name of the Knoxville Railroad has been changed to the Tennessee & Pacific Railroad, the intention being to connect it by way of Memphis and Little Rock with the Southern Pacific road through El Paso.

The project of building a railroad across the isthmus of Tehuantepec is again being discussed, and several parties are seeking the necessary concessions from the Imperial government for that purpose.

It is proposed to extend further north the Adirondack Railroad, now completed twenty-five miles from Saratoga, making a convenience for sportsmen, lumbermen and miners.

A Harrisburg letter to the Philadelphia *Press* says. it is rumored that a bill is to be offered, making it illegal for any railroad company to send passes to members or employes of the Legislature.

It is proposed by the citizens of Butler county, Iowa, to grade and tie the road from Waverly to Clarksville, if the line of the D. & S C. Railroad is changed to include Clarksville.

The Union Pacific Railroad Company, whose road runs west from Omaha, has been laying its track this winter at the rate of half a mile per day. This road is now within one mile of Fremont.

The Directors of the Oil Creek Railroad at a recent meeting, elected S W. Steward, Esq., of Corry, President, and H. F. Sweetser, Superintendent.

The Union Pacific R. R. bridge over Kansas river, having been completed, passengers now go through to Topeka, Kansas, without change of cars.

It is said that the Reading Railway of Pennsylvania proposes to lay four tracks upon their line to accommodate their immense traffic.

The Tideonte *Chronicle* reports three hundred hands at work, grading the new road from Irviue to Oleopolis.

The Baltimore & Ohio Railroad Company have assumed the management and control of the Winchester & Potomac Railroad.

It is reported that the Winchester, Virginia, Railroad has passed into the hands of the Baltimore & Ohio Railroad Company.

There are one hundred and forty eight miles of city passenger railroad track in Philadelphia, operated by nineteen companies.

About forty miles of the Kentucky Central Railroad has been laid with the "fish joint" rail, a great improvement on the old T rail.

Marietta Railroad.—Trains will commence running over the new track from Cincinnati to Loveland, on the 19th.

## PERSONAL.

New Treasurer.—Mr. W. R Freeman, late Treasurer of the Reno, Oil Creek & Pithole Railroad, has resigned that position, and returned to the office of Culver, Penn & Co., New York. John Walker, Esq. of Meadville, succeeds Mr. Freeman in the Treasurer's office of the above road.

J J. Lawrence Esq., for over two years past Sup't of the "middle division" of the Phil'a & Erie Railroad has resigned his position to accept the Superintendency of the Erie & Pittsburg R R headquarters at Erie City. The vacancy caused by his retirement has been filled by the appointment thereto of A. J. Garratt, Asst. Gen. Supt.

The *Cleveland Herald* says: "Mr. Conrad Rector, one of the oldest engineers on the Cleveland & Toledo Railway, died at Norwalk, Thursday morning, January 4th. Mr Rector held a position on this road from the time trains commenced running on it, and his death will be deeply regretted and his genial presence missed by his associates and a large circle of friends."

A. Newman has been appointed General Ticket Agent of the Chicago & St. Louis R. R. line.

## MONETARY AND COMMERCIAL.

The demand for money is much less urgent and the discount market is easy. The ruling rate is 10 per cent., but first class paper has been done as low as 8 per cent.

Exchange has improved, and with the increase of currency, tends higher daily. Government bonds are declining, as will be seen by our quotations:

| | Buying. | Selling. |
|---|---|---|
| 5-20's, old | 102½ | 103 |
| 5-20's, new | 102½ | 102½ |
| 10 40's | 94⅛ | 94½ |
| 7 30's, August | 99⅛ | 99¼ |
| 7-30's, June | 99 | 99⅛ |
| 7-30's, July | 99 | 99⅛ |
| Certificates | 98½ | .... |

The unsettled condition of the gold market, renders weekly quotations nearly useless.—Dealers here do not follow eastern quotations very closely. We give the latest figures:

| | Buying. | Selling. |
|---|---|---|
| New York | 50 prem. | 1-10 prem. |
| Philadelphia | 50 prem. | 1-10 prem. |
| Boston | 50 prem. | 1-10 prem. |
| Gold | 139½ | 140@140⅛ |
| Silver | 129@132 | 133@134. |

It is believed that the finance bill will not pass Congress in its present shape. Many of the prominent financiers of the country object to its provisions, and believe that it will but embarrass the Treasury Department. It is to be hoped that an acceptable substitute will be passed before Congress adjourns, that the people generally may have a basis for operations; trade is greatly hindered, by the uncertainty which envelopes our financial policy.

Railway stocks show a slight advance; but with the decrease of earnings, and the croakings of a portion of the press, they will not, for some time, regain their true value.

| | Wed. A. M. | Wed. P. M. | Thrs. A. M. |
|---|---|---|---|
| U. S. 6 per ct. Bids, 1881 | 103⅜ | 104 | 104⅛ |
| " 5 20 " old | 103½ | 102½ | 103 |
| " 5 20 " 1864 | 102⅝ | 102⅛ | 102½ |
| " 5 20 " 1865 | 102⅝ | 102½ | 102½ |
| " 0 40 " | 94½ | 94½ | 94⅝ |
| " One year Certificates | 98⅝ | 98⅝ | 98⅝ |
| 7-30s, 1st series | 99½ | 99⅝ | 99¼ |
| 7 30s, 2d series | 99⅛ | 99 ⅛ | 99¼ |
| 7 30s 3d series | 99½ | 99¼ | 99½ |
| New York Central | 87⅜ | 88 | 87⅞ |
| Erie | 77 | 77⅛ | 77½ |
| Hudson River | 99½ | 100½ | 100 |
| Reading | 98⅝ | 99 | 98⅝ |
| Michigan Central | 101⅜ | 101½ | 102 |
| Michigan Southern | 67½ | 68⅜ | 68⅜ |
| Illinois Central | 115 | 115½ | 115 |
| Cleveland & Pittsburg | 79⅝ | 80½ | 79⅝ |
| Chicago & Northwestern | 26⅜ | 27½ | 27⅜ |
| " " pref | 53⅜ | 54 | 54⅜ |
| Cleveland & Toledo | 106 | 106 | 106 |
| Rock Island | 99⅛ | 99½ | 99½ |
| Pitt Ft. Wayne & Chicago | 91⅜ | 92½ | 92 |
| Ohio & Miss Certificates | 24⅛ | 24½ | 24½ |

By the following circular it will be seen that the New York and New Haven Road will soon arrange its losses growing out of the Schuyler frauds. Of the $900,000 judgments against the Company, Commodore Vanderbilt's is reported to exceed $400,000, and A. Belmont's $100,000. The remainder is in small amounts.

"*To the Stockholders of the New York and New Haven Railroad Company:*

"The Court of Appeals having affirmed the decision of the Supreme Court in the matter of the New York and New Haven Railroad Company against Robert Schuyler and others, whereby this Company is called upon to pay judgments to a large amount; therefore it was, at a meeting of the Board this day,

"*Resolved*, That, in order to pay these judgments, the capital of this Company be increased to $5,000,000, alloting to each stockholder 40 per cent. in stock in addition to the amount standing in his name on the books of this Company, on Saturday, Jan. 27, inst, by the payment to the Company of $75 on each share so allotted.

"*Resolved*, That notice be given to the stockholders of the action of this Board, requesting them to notify the Company of their acceptance of the additional stock, on or before the 20th day of February.

"*Resolved*, That $75, in cash, be paid on each share, on or before Tuesday, the 20th day of February, when, on such payment, certificates of full paid stock will be issued therefor. A discount at the rate of six per cent. per annum will be allowed to parties paying in advance of the above date, and that the books be closed after January 27 until February 21.

"*Resolved*, That the Committee of Adjustment, raised December 26, be requested to carry out the above resolution.

"G. B CARHART, WILSON G. HUNT, JAMES J ROOSEVELT, E. C SCRANTON, GEORGE N. MILLER, Committee of the Board of Directors of the New York and New Haven Railroad Company."

*New York*, Jan. 22, 1866.

### Railroad Earnings.

The report of the Oil Creek Railroad for 1865, shows an increase in gross earnings of nearly eighty seven per cent. over the preceding year, the business of the past six months being more than $150,000 in excess of the total business of 1864.

The receipts of the city railways in Chicago last year were $656,000; number of passengers, 13,000,000.

The gross receipts of the street railroads of St. Louis last year, as represented on the U. S. Assessors' books, were $627,128. One of the roads was only in operation one month, and another is a continuation of the Citizens' line, running from the outskirts of the city to Benton Barracks. The estimated number of persons carried is over 12,000,000.

The Chicago & Alton Road earned, the third week in January:

1865.....$69,500 | 1866.... $48 970 | Dec.....$20,530

The Detroit & Milwaukee Road, in the third week shows a gain of $2,417.

The receipts of the Western Union Railroad Company for the week ending Jan. 21, were:

1866....$9,511 71 | 1865....$11,092 60 | Dec....$5,580 89

The receipts of the Racine & Mississippi and Northern Illinois Railroads for the week ending Jan 14, were:

1866....$9.584 10 | 1865....$11,035 79 | Dec....$1.451 69

The Indianapolis & Cincinnati road showed, in December and January, an increase in its earnings. It is stated that the Chicago & Alton road will make a scrip dividend in addition to its usual cash dividend.

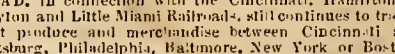
THE ATLANTIC & GREAT WESTERN AND NEW JERSEY RAILROADS.—The New Jersey papers say that the Atlantic & Great Western Railway Company, under terms of their agreement with the Morris & Essex Railroad Company, have contracted for the whole of the grading of the branch road from Denville to Bloomfield, a distance of twenty-three miles. The work on the entire line of road is to be pushed forward with all possible dispatch and the contractors hope to have the whole completed within twelve months.


**WRIGHTSON & CO.**

# Printers,

167 Walnut St., Cincinnati, O.

## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch

For Rates, Bill of Lading, or any information desired shippers will please apply to

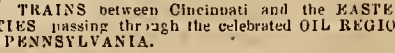
H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent.
my11 Pittsburg, Pa.

**Change of Time, Monday, Aug. 7th.**

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M
Arrive at Cincinnati.....6:30 A. M., and 7:10 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent.

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenger Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

# RAILROAD OFFICES AND AGENTS

**Atlantic & Great Western Railway**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A. B. Waters, Freight and Ticket Agent, Cor. Third and Walnut

**Ohio & Mississippi**

W. E. Bruce, Freight and Ticket Agent, Gazette Building, 82 West Fourth Street
Elmer Jackson, Ticket Ageot, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J. R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg, Contracting Agent, Vine St. under Burnett House.
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 67 W. Third St
Sydney Rice, Contracting Agent, " "

**Central Ohio & Pittsburg, Columbus and Cincinnat**

James E. Shields, General Agent, No 77 W. Third St.

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C. Harra, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange

**Erie Railway.**

A. J. Dey, S. W. Passenger Agent, No. 4 Mercha Exchange.
G. G. Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J. W. Burch, General Eastern Agent, No. 2 Burnet House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burnet House.

**New York Central.**

G. B. Gibson S. W. Passenger Agent. W. H. Page, Local Passenger Agent, 8 and 9 West Third St.
Geo S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Pittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Baltimore and Ohio.**

H. Herbert, Gen. Western Agent. No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.

# 1865.

## CHANGE OF TIME!

By the Broad Road Gauge Route, the

# Atlantic & Great Western R'y.

## TWO THROUGH TRAINS DAILY TO EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI | 9: 0 A. M. | 10 40 P. M. |
| HAMILTON | 9:57 " | 11:43 " |
| DAYTON | 11:30 " | 12:55 A. M |
| SPRINGFIELD | 12:35 " | 1:45 " |
| URBANA | 1:40 P. M. | 2:15 " |
| GALLION | 5:25 " | 6:10 " |
| MANSFIELD | 6:50 " | 7:15 " |
| AKRON | 9:30 " | 10:00 " |
| RAVENNA | 10:05 " | 0:40 " |
| LEAVITTSBURG | 11:00 " | 11:40 " |
| GREENVILLE | 12:15 A. M. | 1:0 P. M. |
| MEADVILLE | 1:20 " | 2:30 " |
| CORRY | 2:45 " | 3:55 " |
| Arrives SALAMANCA | 4:58 " | 2:55 " |
| NEW YORK | 10:30 P. M. | 1:00 " |
| BOSTON | 2:30 " | 8:00 A. M. |
| PITTSBURGH | 2:20 A. M. | 3:20 P. M |
| HARRISBURG | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA | 5:35 " | 6:55 " |
| BALTIMORE | 5:15 " | 7:00 " |
| WASHINGTON CITY | 9:05 " | 10:35 " |

The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

## THIS IS THE ONLY ROUTE TO THE OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

### SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

**Ample time is allowed, at all hours, for meals.**

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

### CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at the corner of Broadway and Front streets, and at No. 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices in the West and South West.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, CHAS. COOK, } Passen Agents.

# CENTRAL RAILROAD —OF— NEW-JERSEY.

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware Lackawanna and Western Railroad, and at Kas on with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS.

Commencing April 24, 1865, leave New-York as follows:

At 6: 0 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston, Binghampton etc.

9: 0 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12: 0 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg etc.

4 p. m.—For Easton, Scranton Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

# NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 5:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 2:00 (Ex.); 3:15; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:15; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:15; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p. m.

For Port Chester and intermediate stations, 7:00; 9:20; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 9:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12:15; 5:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 1:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m. and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7.00; 9:30 a. m.; 4:30 p. m.

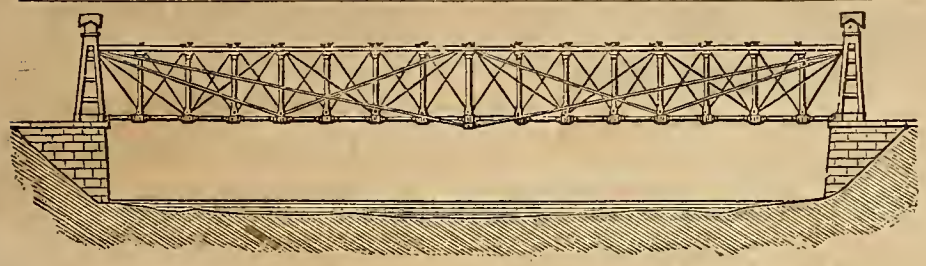
Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT. Superintendent.

# NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



(*Plan of Idye.*)

## FINK'S PATENT
## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

**HOLENSHADE, MORRIS & CO.**

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

**SCREW BOLTS,**

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

**M. W. BALDWIN & CO.**

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; all in accomodating them to the grades, curves strength superstructure, and rail and work to be done By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

**KNOX & SHAIN,**

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS.

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

**FINDINGS,**

AND

**MACHINERY,**

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

**BUSH & LOBDELL,**

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

**Chilled Wheels and Tyres**

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

**AMERICAN BANK NOTE COMPANY.**

*Bank Note Engravers & Printers.*

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEO. T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

**SUPPLIES,**

—AND—

MACHINERY OF EVERY DESCRIPTION.

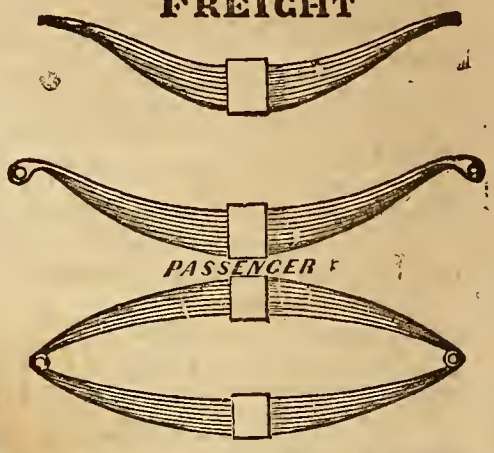
**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

RAILWAY SPRINGS.

**FREIGHT**




THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS.**

Made at his Shops in Philadelphia Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y

Shops—Seventeenth and Coates St. PHIL.

---

**Railroad Iron.**

The undersigned agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

W. M. F. HEWSON,

**STOCK BROKER,**

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and does collo

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new unuing stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $1,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W P. SMITH. *Master Transportation. Baltimore*
J H. SULLIVAN, *Gen. Wes Ag't. Bellaire, O.*
L M COLE. *Gen. Ticket Agent. Baltimore.*

## Little Miam. and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express..... ..... | 6 00 A. M. | 6 30 P. M. |
| Mail and Express ..... | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation..... | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation..... | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express..... | 10 00 P. M. | 7 50 A. M |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City.. | 6 00 A. M. | 10 05 P M. |
| Toledo & Detroit. . ..... | 7 00 A M. | 9 45 P. M |
| Dayton & Sandusky Mail..... | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago..... .... | 7 00 A. M. | 9 25 P. M. |
| Mail and Express.. ..... | 9 40 A M. | 6 30 P. M. |
| Dayton Accommodation..... | 2 10 P. M. | 9 25 P M. |
| Indianapolis & Cambridge City.. | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville.... | 5 00 P. M. | 12 5 P. M. |
| Hamilton Accommodation..... | 7 30 P. M. | 6 45 A. M. |
| Richmond & Chicago..... | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express ..... | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation..... | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

SUNDAY, JUNE 19, 1865.

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| | Depart. | Arrive. |
|---|---|---|
| Loutsville, St, Lonis and Cairo Mail..... | 7:20 A. M | 8:00 A. M. |
| St. Lonis, Cairo, & Louisville.... | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train..... | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, aplease apply at the Ticket Office, No. 82 Fourth Street, adjoining the Gazete Office: No. 12 Broadway, Railroad Hotel building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E. FOLLET, General Tick Agent.

W. D. GRISWOLD, General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis Lafayette, Springfield Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 6:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 3:26 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are have RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

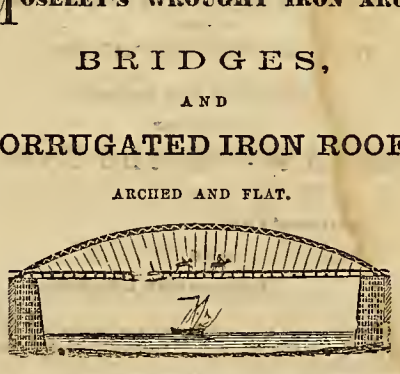
## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



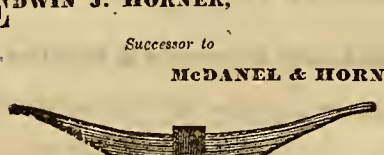
CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER.**



*Locomotive and Railroad*

## CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—4 to 24 inches in diameter, and branches for same. &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, THUS. T. TASKER, JR., CHAS WHEELER, S. F. M. TASKER, HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!

## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4 30 (Express Monday excepted), 8.05 A. M.; 12. A. M (Express); 2.30 P M; 11 30 P M night.

On Sundays, 4 30 A M; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.56 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, FEBRUARY 15, 1866.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

WRIGHTSON & CO.,

*Proprietors.*


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | *Depart.* | *Arrive.* |
|---|---|---|
| Cincinnati Express | 6:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:00 P. M. | 4:00 A. M. |
| Morrow Accommodation | 5:30 P M. | 8:00 A. M. |
| Night Express | 7:00 P. M. | 3:50 P M |
| Night Express | 10:00 P M. | 9:40 A. M. |

MARIETTA AND CINCINNATI.

| | | |
|---|---|---|
| Mail | 5:00 A. M. | 7:30 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P. M | 5:45 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Indianapolis & Cambridge City | 7:00 A M. | 9:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:50 P. M |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P M. |
| Richmond and Chicago | 7:00 A. M. | 9:50 P M |
| Dayton Accommodation | 6:35 P. M. | 9:35 P M. |
| Dayton Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A M. |
| Richmond & Chicago | 5:30 P. M. | 11:0 P. M. |

CHICAGO & GREAT EASTERN.

| | | |
|---|---|---|
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " " | 5:30 P. M. | 1:20 P M |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A. M. |
| Mail & Springfield Express | 2:0 P. M. | 4:30 P. M. |
| St Louis and Chicago Express | 7:30 P. M. | 1:10 A. M |
| Lawrenceburg and Harrison Accommodation | 4:30 P M. | 8:30 A. M. |
| Harrison Accommodation | 10:15 A M. | 2:20 P. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M | 4:35 P. M |
| Caboose Accommodation | 4:00 P. M. | 8:00 A. M. |

KENTUCKY CENTRAL.

| | | |
|---|---|---|
| Express | 6:00 A. M. | 6:30 P M |
| Accommodation | 1:50 P. M. | 11:00 A. M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Morning Express | 9:10 A. M. | 6:30 P. M. |
| Night Express | 6:50 P. M. | 2:30 A M. |

### Commerce and Navigation of the United States.

No document, of the many published by the Government, is more interesting than that on Commerce and Navigation. Although it consists entirely of figures, and must be very disgusting to people who deal only in works of imagination, yet, we read it with increasing satisfaction. We learn much from it; and we see in it the rapidly increasing growth and power of our country. It is unfortunate, that the Government with all its vast power can not get its documents printed in less than two years time. Indeed, it is rare for it to do as well as that; for the last one we have before us is the Report of 1862. But, statistics can afford to wait, for they are always good. From the Report of 1862, we take some of the leading facts. It was said that our tonnage had greatly diminished during the war, in consequence of many of our vessels being enrolled in foreign countries, for fear of the captures and damage caused by the Rebel Pirates. But, this is not true. Our tonnage is nearly, or quite as large, as it has ever been: but, it is not as large as it would have been, had the war never existed War has done its work in commerce as in every thing else, in retarding the growth of trade and business. But, its effects on foreign commerce have not been great.

The total tonnage of the United States in 1862 was:

| | Tons. |
|---|---|
| Registered tonnage | 2,291 251 |
| Enrolled tonnage | 2,820,913 |
| Aggregate tonnage | 5,112,164 |

The *registered* tonnage is the foreign trade and whale fishery, &c. The *enrolled* tonnage is that employed in the coasting trade, cod fishery, mackerel fishery, &c. The tonnage employed in the coasting trade, fisheries, &c., is thus enumerated:

| | Tons. |
|---|---|
| Coasting trade | 2,568,568 |
| Whale fishery | 117,713 |
| Cod fishery | 122,862 |
| Mackerel fishery | 80,596 |
| Steam navigation | 710,462 |
| Total | 3,600,201 |

As the largest part of the steam navigation is on our rivers and lakes, we see that not more than one-third of our tonnage is employed in the foreign trade. The greatest source of employment to vessels and seamen is the coasting trade, and when we consider that we have *thirty-two thousand miles of coast*, it is in no way strange, that large numbers of men and vessels should be employed in it. The next point of interest is ship building. The number of vessels built in 1862 are thus enumerated:

| | |
|---|---|
| Ships and Barks | 60 |
| Brigs | 17 |
| Schooners | 207 |
| Sloops and Canal boats | 397 |
| Steamers | 183 |
| Total number of Vessels built | 864 |
| Total tonnage | 175.075 |
| Average tonnage of each vessel | 200 tons. |

The building of vessels fell off from 1860 to 1862, one-fifth; and this was to be expected, when so much of the energy and resources of the nation was involved in the war.

The States in which, and the amount of ship-building in 1862, were as follows:

| | Vessels. | Tons. |
|---|---|---|
| New York | 338 | 64,855 |
| Pennsylvania | 197 | 26,085 |
| Maine | 75 | 26,264 |
| Ohio | 40 | 13,300 |
| Massachusetts | 33 | 12,886 |
| Michigan | 30 | 6,912 |
| Maryland | 27 | 4,415 |
| Connecticut | 13 | 5,369 |
| New Jersey | 18 | 2,573 |
| Delaware | 6 | 2,595 |
| California | 28 | 2,524 |
| Illinois | 5 | 1,411 |

The other States built but very few. Ohio, which is the fourth in ship-building owes this to the fact, that she has an extensive coast on both lake and river, amounting to not less than seven hundred and fifty miles, including the ports of Cincinnati, Cleveland, Sandusky, and Toledo. The steamboat building in 1864 was rather under the average, but not much. The average of steamers built annually in the last ten years is 250. If we suppose the average life of a steamer is ten years, then there must be 2,500 steamers in existence, belonging to the United States, and we suppose there must be at least that number. Steamboat tonnage amounts to 710,000 tons; and we know that the average tonnage is over 250 tons. This would give 2,840 steamers, and this can not be far from the truth. The ocean steamers are constantly increasing, and now since the return of peace, the river steamers will also increase with great rapidity.

The losses, wear and tear of vessels may be estimated from the following facts, viz.:

| | Tons. |
|---|---|
| Tonnage sold to foreigners in 1862 | 117,756 |
| " condemned as unseaworthy, | 14,802 |
| " lost at sea | 41,352 |
| " sold to United States | 73,269 |

The first three items amount to 173,910; and this is very nearly the amount of tonnage added by the building of new vessels. The vessels sold to the United States are no loss; for they either are, or will be sold to individuals.

The tonnage which *entered* our ports, which was *foreign*, belonging to other nations, were as follows:

| | Number of Vessels. | Tons. | Crews. |
|---|---|---|---|
| British | 9,637 | 1,835,096 | 87,637 |
| Bremen | 196 | 145,674 | 4,639 |
| Hamburg | 83 | 85,612 | 3,663 |
| Swedish | 102 | 37,249 | 1,208 |

| | | | |
|---|---|---|---|
| French | 50 | 17,008 | 726 |
| Prussia | 56 | 23,287 | 756 |
| South America | 21 | 4,867 | 230 |

We see by this statement how enormously Great Britain preponderates, in the foreign tonnage entering our ports. The American vessels which *entered* were more numerous than the foreign, amounting to the arrival of 10,805 vessels. The chief ports of entry were:

| | Arrivals. |
|---|---|
| New York | 5,815 |
| Boston | 2,717 |
| Oswego | 2,567 |
| Buffalo Creek | 2,038 |
| Portland | 619 |
| Philadelphia | 555 |
| Baltimore | 387 |

The great number of entries at Oswego and Buffalo were from Canada, and were comparatively small vessels, carrying freight under the Reciprocity Treaty.

### The Cincinnati Southern Railroad.

Some weeks ago, we noticed the appointment of a committee by our Chamber of Commerce to confer with similar committees from the line of the proposed Southern road, and report such facts as they might become possessed of.

On Wednesday afternoon last, in pursuance of the above object, Messrs. Miles Greenwood, Joseph Torrence, L Worthington, H. C. Lord, W. R. Pearcy, Theo. Cook, R. M. Bishop, Larz Anderson and J. C. Butler, on the part of the committee, received a delegation from Danville and Boyle county, Ky., consisting of Messrs. Bowman Hoskins, G. W. Welch and A. Robinson.

Mr. Greenwood was called to the chair, and Mr. Sinton of this city, principal of the Lexington & Danville R. R., by request, stated the condition of the Kentucky roads, and favored the formation of a grand trunk road via Kentucky Central and Danville, to Knoxville.

Messrs. W. H. Clement, Torrence, Theo. Cook, Col. L. A. Harris, and Thos. H. Weasner were appointed a committee to procure such legislation as may be needed by the city and interested roads to aid the project.

After some explanatory remarks, and addresses by Col. Hoskins, H. C. Lord, D. Sinton, R. M. Bishop, Theo. Cook and others, the following resolution was unanimously adopted:

*Resolved*, That it is the opinion of this Committee that it is expedient for the city of Cincinnati to contribute, as a bonus, the sum of one million dollars to any association of capitalists who will proceed to build and speedly finish a first-class railroad connecting Cincinnati with Knoxville, Chattanooga or any point on the Georgia & Tennessee Railroad, east of Chattanooga; said bonus to be paid on the completion of the work.

During Change to-day, Theo. Cook, Esq., President of the chamber, reported the action of the committee, whereupon J. C. Butler, Esq., offered the following:

Whereas, The committee appointed by the President of this Chamber, to consider plans for building a railroad to the South, have adopted the following resolutions, viz:

Resolved, That it is the opinion of this Committee that it is expedient for the city of Cincinnati to contribute, as a bonus, one million dollars to any association of capitalists who may proceed to complete and speedily finish a first-class railroad connecting Cincinnati with Knoxville or Chattanooga, at a point in the Georgia & Tennessee Railroad east of Chattanooga, therefore,

Resolved, That the views expressed by said committee in said resolution are hereby approved by the Chamber.

Resolved, further, That the action of said committee in taking steps to secure such legislation as will enable our city, in her corporate capacity, and the various railroads centering here, to aid in the construction of this much needed work, is hereby approved by this Chamber.

Mr. Butler remarked that he desired a postponement of the subject, until Monday afternoon next, at 2 o'clock, that it might be duly deliberated upon. A motion to that effect was unanimously carried, and the resolutions made the special order for Monday next.

The movement is now fairly inaugurated, and in the hands of the energetic and well selected committee, cannot fail to meet with full justice.

No project was ever devised, looking towards the future business connections and commercial interests of this city, that deserved more careful attention at the hands of our citizens. Thirty years ago, this route was shadowed forth, and the lapse of time has but made its great benefits more conspicuous.

As an outlet for the lumber, lead, oil, iron and agricultural products of the rich, but hitherto neglected country through which it passes, its value is inestimable. As a short route to the Southern seaboard, and as a supply line to the interior its advantages have been repeatedly set forth in this paper. In addition it will enjoy a freedom from competition, for many years at least, that will be not unprofitable to its stockholders.

Along the proposed line of the road, enthusiastic meetings have been held, and money freely offered. Chattanooga is making earnest efforts to further the scheme, which is to aid her in becoming the Pittsburg of the South. And Eastern Tennessee, though sadly impoverished by war, hails the new road as a harbinger of future prosperity.

We think that Cincinnati is prepared to do her share in the construction of this road.—A million of dollars is a cheap equivalent for the manifold benefits that will flow from the new connection, and with the endorsement of her Chamber of Commerce, the city cannot hesitate long in performing what is not merely a duty, but a necessity.

It will be noticed that St Louis is moving for a connection with Knoxville, and as the amount of road to be constructed is nearly or quite equal, we may guage the public spirit of the respective cities by the time required to complete the several roads.

### Report of the Pacific Railroad Committee.

The Pacific Railroad Convention of United States Commissioners and Directors, and the representatives of connecting roads, while in session at St. Louis, a few days since, appointed a committee to consider the whole subject of the business of the road. The following is their report:

"Your committee, after availing themselves of the views expressed by several engineers to whom they have referred, and in contemplation of the reasonable construction of the law of Congress, recommend to the Board the adoption of the following general rules as those which shall govern all parties engaged in directing, constructing or accepting the work: Every step taken in the work, and especially in the location of lines and grades, should be adapted to ultimate perfection, whatever may be the immediate interests or necessities, so as to secure to the nation a grand and complete structure, every way worthy of our country, and an honor to the distinguished men who involve their capital and energies in so vast an enterprise. Great care should be observed in the determination of the general and detailed location of the main lines, consistent with economical grades. It is clearly the interest of the Government, and not prejudicial to the companies, to determine such points as a great general line should have, so as to unite as far as possible, all the great ultimate purposes of a central and convenient channel for the commerce of the nation that is likely to traverse the road. With this general view of the work, careful and extended surveys should be made and well considered. While the law makes the grades and surveys adopted on the Baltimore & Ohio Road as the standard, this is only to be considered as a limit to be adopted in mountain districts. Introducing grades of 116 feet per mile, or curves as sharp as 400 feet radius on other parts of the road, would manifestly violate the special intent of the road. Grades and curves should be settled upon principles of true economy. It is safe to say, in advance that the Platte and Kansas valleys, and on smooth valleys and level plains no grade should exceed thirty-six feet elevation per mile. In all parts of the main line of road or its branches, the embankment should not be less than fourteen feet wide at the grade line. If the excavations or cuts are long, they should be 26 feet wide, and in shorter cuts at least 24 feet. thus leaving in all cases some space for continuous side ditches of ample depth and width, so as to secure that most essential requisite, a well drained road bed. Rock excavation should not be less than sixteen feet wide, and all tunnels should be excavated for a double track. The slopes of earth embankments should be one and a half at the base to one at the rise. The excavation, except in rock, should have slopes from one to one and a half at the base, to one at the rise, depending upon the material. Culverts and abutments for bridges and drains should be of stone,

whenever a durable article can be obtained within a reasonable distnnce—say from five to eight miles, depending upon circumstances, provided, that temporary trestles may be adopted, upon the assurance to the satisfaction of the Commissioners that stone abutments will be substituted immediately after the line is opened so that stone can be transported thereon; but if good stone be too remote, then hard burned bricks or wood trestles may be adopted, the wood to be of the most durable character the country will afford, and the wood or bricks to be replaced by stone, when that material can be conveyed conveniently by rail. The bridges are to be of iron, or stone, or wood, such as the Howe truss, or other equally good structures A railroad cannot be considered complete until it is well ballasted. If composed of gravel or broken stone, it should be from twelve to twenty-four inches thick, depending on the lower material. In view of the settling of new embankments before ballasting can be properly placed, and also in view of the number of miles required by the law to be constructed annually, the perfect finish of the road bed in this respect must be progressive, and the work of time; yet it is the opinion of the Board that such work of perfecting the ballast must proceed as usual on first class railroads. For ties, oak or other suitable timber, should be used when it can be obtained with reasonable transportation. When such timber can't be had for all the ties at reasonable cost, then the best the country affords may be adopted; but if it be cotton wood, or similar soft material, it must be burned or kyanized thoroughly, so as to increase its durability; but in all cases the joint ties should be of oak, or other suitable timber, the better to hold the spikes at these points. There should be at least 2,400 ties to the mile They should be eight feet long, six inches thick, and, if hewn, six inches on the face.—If sawed, they should not be less than eight inches wide, and not less than 2,400 per mile, or such a number as will have the same bearing surface; provided that if any sawed ties had been already delivered or contracted for only seven inches wide, they may be laid down. The rails should be of American iron as required by law, of the first quality, and should weigh sixty pounds to the yard, but in consideration of the great cost of transportation from the present location of the rolling mills to the remote sections of this road, iron may be adopted which weighs only fifty-six pounds to the yard. In mountain districts however, where the heavier engines will be used, not less than sixty pound rails should be adopted; provided that if any of the companies have on hand or contracted for any rails of different weight from that therein specified; and not under fifty pounds per yard, such rails may be used. The rails should be attached to each tie by spikes drove on both sides of the rail. As the nearest approximate to a continuous rail, the so-called fish joint is preferred and recommended; but if it is found that it will retard the progress of the work, the common American wrought iron chair may be used.

"The length of the side tracks should be at least 6 per cent. of the line completed, and to be increased as the number of passing trains shall demand. Side tracks should also be laid 8 feet apart in the clear between the rails

"Whenever cattle guards and road crossings are necessary, they should be made.

"Locomotives, engines and cars must be provided in liberal proportion to the traffic.—Engine houses, repair shops and station buildings should be adapted to the wants of the service. At the opening of business, the extent and capacity of the buildings may be only such as to provide liberally for the existing rolling stock and business of the road, and such probable early increase as may seem likely; but the plans in all cases, both as to the buildings and ground, should be arranged for enlargement and extensions equal to any future business of the rond, the buildings at first erected forming appropriate parts of the complete and systematic whole; the engine house and repair shops at the principal stations must, in all cases, be of stone or brick, with good stone foundations. The covering should be slate or metallic, to guard against fire. Water stations should be erected at convenient distances to suit the wants of trains. Extensive and convenient portions of ground should be procured to accomodate a future large business, and the proper titles should be carefully secured. All this is the more desirable as lands are now easily obtained at moderate prices. In these specifications it is believed that nothing is required which may not be regarded as essential to a commodious and complete railroad. Nothing is proposed to retard the progress of the Company. The Board earnestly desires to favor and foster the energy and fidelity which now seem to animate those engaged on the construction of the road, but while guarding against delay on the one hand, the public interests requires on the other, a substantial and complete work, and the highest perfection of track reasonably attainable on a new road is expected, and projected as the standard to which the workmen are to arrive. The argument in favor of speedy construction must be subordinate to the substantial objects of the road. The Government must be certain to have a work that will carry her mails, troops, ammunitions of war, and the commerce of the country with entire certainty and celerity of conveyance. It is the aim of this Board to secure all those objects, and it is also our belief that they are not incompatible, it being only necessary on the part of the Government to insist upon the reasonable requirements embodied in this report to hasten the completion of the great work, and at the same time adapt it to the highly public interests which it is intended to subserve."

B. R. Curtiss, Commissioner of the Union Pacific Railroad, and W. S. Ryed, and P. H. Nibley, Commissioners of the Nortb Pacific Railroad; J. L. Williams, Government Director of the Union Pacific Railroad; T. J. Carter, Government Director of the Nortb Pacific Railroad; Springer Harbaugh, Government Director of the North Pacific Railroad; J. H. Simpson, Government Engineer and Commissioner Western Pacific Railroad and Nortbern Pacific Railroad.

---

☞ A process is now used in London by which statuette likenesses, busts, &c., may be produced in clay or plaster at a small cost by the aid of photography. The operation is as follows: Eight photographs are taken of the sitter from eight "sides." From each of these profiles are cut out in thin sheet metal. Each pair of profiles are caused to plane away the sides of a block of clay corresponding to the position in which their photograph was taken. Thus, the clay comes to have on each side the same profile as that of the sitter, and is thus a likeness requiring but a few touches from the artist to give it finish and exactness.

### The Swiss Railway System.

Lucerne may be considered as the head of the Alpine line proposed to connect Switzerland and Italy by way of the celebrated Mount Saint Gothard. It is nt Lucerne that three of the most important lines of the Swiss railway system meet. The first, finished eight years since, starts from Bale, and passes the Jura mountains by means of the Hauenstein tunnel; the second, which has been eighteen months at work, goes from Zurich to Zug, through the Catholic part of Switzerland; the third, which is not yet open, will connect Berne and Lucerne by the Emmenthal and Entlibuch. By these three lines the eastern and western towns of Switzerland, as well as those of the north, will be in easy communication with the lake of the four cantons, and from this central point will start the railway to Saint Gothard. The projected line, on leaving Lucerne, follows the shores of the lake as far as Kussnacht, where Gessler fell by the arrow of William Tell; it turns afterwards to the south east, passing between the foot of Mount Righi and Lake Zug. It thus arrives at Goldau, the place where, in 1806, the falling of the Rossberg buried three villages and a great part of the valley. From there it sends out a branch to Zug, in order to shorten the distance between Zurich and Mount Righi. It afterwards rounds the northern shore of the little Lake Lowerz, crosses the stream of the Muotta, and rejoins at Brunnen the lake of the four cantons. Leaving Brunnen, it enters the classic region of Switzerland. Here is Grutli, the cradle of Helvetic liberty. Opposite Grutli the road attacks the mountain, and, cut out of the rock of the Axen, runs along the picturesque bank of the lake, passing above Tell's chapel, and soon after reaching Fluelen, in the canton of Uri. At Fluelen it meets the valley of the Reuss, which is here a good breadth, and not very steep, and during a course of ten kilometers, midway in which is Aitorf, the chief place of the canton, the line advances without difficulty across fine pasturage. At Erstfield it begins to mount along the right bank of the Reuss, with an incline of twenty in one thousand, and travels round three heaps of rubbish (cones d'eboulement) fallen from the Windgelle; it afterwards passes behind the fort of Swing Uri, the construction of which is attributed to Gessler, and thus arrives at Amsteg. At this place the torrent of the Maderane Valley throws itself into the Reuss, and the horizon is almost entirely hidden by the black pyramid of the Bristenstock. The principal valley narrows suddenly on turning to the southwest, and forms an abrupt and sudden gorge. Now begins the real difficulties of the passage of the Alps. Starting from the station of Amsteg, situated about one kilometre and a half below this pretty village, the railway takes an incline of 25 in 1,000, which it retains up to the entrance of the great tunnel, a distance of twenty-three kilometres. After having crossed the torrent of the valley of Maderane, upon a viaduct sixty-seven metres high and one hundred and thirty-five long, it enters the sides of the Bristenstock, and hollows out seven tunnels to avoid the avalanches which descend from the mountain. Eight kilometres farther it rejoins the valley of the Reuss, near the village of Wyler. From Wyler, however, to the entrance of the great tunnel, the valley is too short to be traversed by an incline of 25 in 1,000—the extreme limit of inclines upon the railway; the way, therefore, bends with a curve of 300 metres radius, and turning backwards upon the left

bank of the river meets a huge buttress of rock, the Gurtnullen, which it pierces by a subterranean gallery formed in a half circle; then, completing the turn just made, finds itself 180 metres abuve the course of the river. We here meet, for the first time upon this railway, the system of spiral or curling inclines, which are used to climb the valleys too steep for a straight line. The lower part of the curl, cut in two by the bridge which crosses the Reuss, includes two tunnels, one of 771 the other of 855 metres; the upper part consists of a single tunnel of 1,656 metres. Emerging from the Gurtnullen, after having finished the spiral just described, the road enters a rocky and very uneven region, which necessitates a series of small tunnels. A magnificent torrent, the Mayenreuss, which runs through the midst of these rocks, is spanned by a bridge of fifty-four metres in height. At a distance of fourteen kilometres and a half past the village of Wyler, the railway, which returns from the left to the right bank of the Reuss, reaches the station of Gœschenen, 1,110 metres above the level of the sea, where the great tunnel opens.

Let us now pause a moment, and before speaking of this immense subterraneous passage, cast a glance upon the region where it commences, and the massive mountain through which it must extend To our left rises the wall of rock which the iron way is about to enter; to the right is the valley of Gœschenen, the long and steep rise of which is crowned by the glacier of Dammafirn; opposite to us appears a narrow slit between two nearly vertical walls of granite, called the Schœllenen, through which the Reuss comes to meet us, and through which also the pustal road mounts to gain the summit of the Col. The more we climb the zigzags of this route the more we feel impressed with the power of nature and by the majesty of solitude. Along this abrupt declivity organic life is nearly extinct. A few stunted pines, some withered herbage, appear at considerable intervals, mingled with the *debris* that the action of the winds and frosts had detached from the mountains, and which fills the bottom of the gorge. Below, the Reuss rolls its foaming waters, struggles impatiently with the winding rocks, dashes against the blocks which obstruct its bed, and fills the air with the sound of its falls. The voice of the wind which mingles with that of the torrent, the aspect of these steep and naked rocks, the tremendous clefts in them, through the narrow openings of which we perceive the sky, all unite to give an idea of some great convulsion of nature. A sudden turn of the road brings us in front of a magnificent cascade, through which we see two vaulted arches. The first and lower one is a ruin, all covered with grass and moss; it is the old devil's bridge which fell in beneath the soldiers of Lecourbe. The second and higher one is the new bridge, a quite modern structure. It carries the road through the very spray of the cascade into a tunnel called the "Tron d'Uri," the pride and the glory of its constructor at the beginning of the 18th century. The gallery of the tunnel leads us into the valley of Urseren, which has the the appearance of a deep basin with a flat bottom; it is covered with pasturage and surrounded by the summits of St. Gothard. Here, also, is the village of Andermatt, near which meet the different sources of the Reuss, descending from the Ober Alps, the Furka, and the St Gothard, and where the military roads recently constructed by the Federal Government converge. From this point the postal road rises to the hospital situated at the top of the Col or pass, and then descends by the Val Tremola to Airola.

In a straight line between Gœschenen and Airolo the great tunnel of the St. Gothard will be excavated. Entering the side of the mountain at a height of 1,110 metres, it comes out at Airolo at an altitude of 1,135 metres. The total length will be 14 kilometers, 800 metres, or about 9¼ English miles. It presents a double incline, rising 7 in 1,000 during the first 7,500 metres, and falling to 10 in 1,000 during the last 7,300. The highest point is, therefore, nearly in the centre of the tunnel, which will allow the water to run off without difficulty during the progress of the works. The nature of the ground will prevent more than one shaft being made, which will be at a distance of 3,500 metres from the northern opening, and will economize nearly a year's labor in construction, and a million of francs in the cost of the undertaking. At Airolo commences the Val Levantina, which extends to Biasca, where the Brenno, descending from the Lukmanier, falls into the Tessin (Ticino). Issuing from the great tunnel, forty metres above the valley, the line follows at first the left slope of the mountain, with an incline of 25 in 1,000, until it reaches the defile of Stalvedro, where the valley contracts so much as to leave room only for the postal road and the torrent itself. Seven kilometres farther the road arrives at Quinto, and from here follows the very bottom of the valley until it reaches Dazio Grande; it then resumes the left slope, and clears, by means of a tunnel, a second defile and the fall of the Tessin. At this point the downward incline of the ground is so rapid that, at one kilometre beyond the terrace of Dazio, the way is already 100 metres above the river, and passing through a region of deeply ravined debouches above Faido. The steepness of the valley soon obliges the line to make a laborious circuit, for on approaching Giornico we shall see it turn towards a projecting rock, and by a semicircular tunnel go back upon its course for a distance of three kilometres, crossing the Tessin by a second curve, one-half of which is subterranean. It then keeps the right bank of the river for three more kilometres, and again passing over the Tessin, reaches at last upon the left bank the village of Giornico. This spiral incline was necessary to preserve the gradient of 25 in 1,000, as the average inclination of the valley between Faido and Giornico is 28 in 1,000. From Giornico to Biasca no more serious difficulties are met with, and at Biasca, which is only 310 metres above the level of the sea, the Tessinese road to Bellinzona commences. Nothing remains after this but to make a junction with the Italian railways, prolonged to the Swiss frontier.—"*Les Chamins de fer Alpestres et le Saint Gothard*," par M. Feer Herzog.

### The Railroad Case.

In the case of Brooks against the Grand Trunk Railway Company, the point of law as to whether a person taking an unconditional through ticket is compelled to continue upon the train on which he sets out, was argued at length by the able counsel employed in the case. His Honor, Judge Witherell, held that the holder of a ticket is so compelled to continue upon the train. This settled the case before the Court, the jury being instructed to bring in a verdict for the defendant, which they did without leaving their seats The case will, of course, be taken to the Supreme Court on exceptions to this ruling. Its final decision there will be important.

### Our Western Connections—Marietta & Cincinnati Road.

We have from time to time called public attention to the value and importance of the Parkersburg line, connecting us—through the Baltimore and Ohio Road, with the West, by means of the Marietta and Cincinnati Railroad, two hundred miles in length between Belpre, opposite Parkersburg, on the Ohio River, and Cincinnati.

From various causes this line has not as yet assumed the importance which its admirable location and its very extended connections would warrant us in expecting for it. It is now, however, about emerging from its difficulties, and bids fair to prove very soon all that its friends have hoped.

The Marietta and Cincinnati Railroad is one of the many similar enterprises in the West that encountered the financial storms of 1857, at a period of its advancement, which proved fatal to its credit, and forced it into a process of capitalization. By this process its entire indebtedness was converted into stock—former creditors becoming owners—thus uniting with the original stockholders in fixing a permanent basis of credit.

Upon this basis the company, as reorganized, have been able to raise means necessary to finish the road, and supply it with equipment sufficient for its large and increasing business. During the past three years over three million dollars have been expended in various works of completion and improvement. Two long tunnels, at points where the line was thrown over the hills upon high temporary grades—much of it supported by trestle work—have been completed. All the bridges on the line are new, and of the most excellent character. Passing over the rugged surface of Southern Ohio, several miles of its track, when just opened for public use, rested upon trestle work. These have been nearly all displaced with solid masonry and permanent embankment. Temporary grades resorted to at first to save expense, have been cut down and the track ballasted with gravel or broken stone. The alignment of the road is remarkably favorable—nine-tenths of it being either straight line or curve of 2,865 feet radius. The maximum grade will be 8-10 feet to the mile. Next in importance to the completion of its main track is the fact that it has constructed an independent line, under its own charter from Loveland (its present point of intersecting the Little Miami road) to the city of Cincinnati. This new route sweeps around the city on the north and west, entering it by Mill Creek Valley. By this route the Marietta road is brought in direct connection with the entire railway system of the West, Northwest and Southwest, centering in Cincinnati It has the use, in common with the Indianapolis road, of the new and splendid passenger depot recently built by that company on Pearl street. Ample grounds have also been secured in the same vicinity for the accommodation of an extensive freight traffic, and buildings for that purpose are now being erected. The very central position of these facilities in the city of Cincinnati affords most decided advantages for the vast amount of traffic now concentrating at that point, while the close connection with the other Western roads afforded by this line must give it a decided preference for *through* business.

By the first of February next the trains of the Marietta road will enter the city upon this new line. The public will then be offered a continuous uniform gauge, from the seaboard

to the Mississippi River (over which traffic may be passed without change of cars,) extending from Baltimore westward so directly that for the whole distance to St. Louis the entire route will not vary one degree from an air line.

The ferriage of the Ohio River at Parkersburg presents the only break in the continuity of this rail line. This will soon be supplied with a permanent railroad bridge, now being constructed by the Baltimore and Ohio and Marietta Companies. The traffic of the Marietta road has steadily increased from an aggregate of $386,275, in 1857, to $1,222,000 in 1865 Of this traffic, eleven-twelfths is derived from *local sources*, composed of the minerals of the coal and iron district of South eastern Ohio, and the agricultural products of the Scioto and Miami Valleys.

The company is now prepared to enlarge its operations in the direction of *through traffic*, and to this end have secured a good supply of new freight cars and new freight and passenger engines. Two daily passenger trains are now run in close connection with the Baltimore and Ohio road at Parkersburg. One of these trains is provided with new and elegant sleeping cars, not excelled by any in the West.

In a word, the Marietta and Cincinnati Railroad is now prepared to assume its proper geographical position as the *central link* in the great railway line, stretching from the Atlantic to the Pacific seaboard, across the Continent.

In connection with this subject, we learn that the necessary and important work of arching the tunnels on the Northwestern Virginia, or Parkersburg road is successfully progressing under the authority of the Baltimore and Ohio Company, which has also lately made much improvement in the track of the road between Grafton and Parkersburg, and are in other respects effectively working that section of their great line between the East and West.—*Baltimore American.*

### The Mobile & Ohio Railroad.

The Mobile & Ohio Railroad, running north and south, is, specially speaking, an Alabama road, although for the greater part of the route it runs through Mississippi; but it was commenced and completed, in a great measure, by the enterprise and capital of Mobile. But, truly speaking, it is a national road, and owes its entire completion to the aid furnished by the States of Mississippi, Tennessee, and Kentucky. It is now the great iron chain which, in commercial and social intercourse, must bind the people of the North and South together in indissoluble bonds of union. Radical prejudice can not interfere with the affections of interest. The road is owned by one company; most of the bonds are held in England; stock is held in the States of Alabama, Mississippi, Tennessee, and Kentucky. The immense value of the road has not been realized, as it was not completed until after the war was declared; hence the commercial world has not experienced any profit from the destined great and wealthy enterprise. It might be called a singular coincidence, that on the night of the day which saw the last rail laid a dispatch was received by L. J. Fleming, General Superintendent of the road, that two thousand Federal troops had landed at Cario, Illinois. The road was incorporated in 1847 by the Legislature of Alabama, and during the session of the Legislature at Jackson, Mississippi, in 1848, it was incorporated under a liberal charter from that State, and subsequently charters were granted in Tennessee and Kentucky, which makes this road one of the longest in the whole country under a single charter; and, what is rather peculiar, that running through four different States, and over the distance of four hundred and seventy-five miles, the line does not cross one stream of water large enough to be called a river of any magnitude. It crosses the Obion, of Tennessee, being the largest river on the northern side, and the Chickasaha is the largest on the southern side. From this fact the company have been spared the expense of building bridges.—*N. Y. Herald.*

### A Coal Route by Rail from Carbondale to Albany—Another New Combination!

At the beginning of the present year, 82 miles of the Albany and Susquehanna Railroad were in use from Albany to Oneonta, leaving 58 miles, on the heavy sections of which work is progressing, yet to be completed, to put in operation the line to Binghampton; making the whole distance from Albany to Binghampton 140 miles.

In 1856, John C. Trautwine, Civil Engineer, of this city, surveyed a route from Hyde Park, opposite Scranton, on the Lackawanna, to Lanesboro on the Susquehanna river, a distance of 54 miles. From Lanesboro a road was projected to the Albany and Susquehanna Railroad at Nineveh, 23 miles from Lanesboro and 118½ miles from Albany.

The intent was to open from the Lackawanna coal field a continuous line of railroad northeast across New York to Albany. And this plan, changed and modified to fit it to existing circumstances, will, we understand, be carried out through the co-operation of the Delaware and Hudson Canal Company with the Albany & Susquehanna Railroad Company, whereby a coal route will be opened from the Lackawanna at Carbondale to the Hudson at Albany. The route is through a populous section of New York, which will soon be intersected with roads that will derive their coal tonnage from Carbondale and its vicinity.

The three New York companies in the Northern Anthracite Coal Field are now all parties in rail outlets to tidewater.

The Delaware, Lackawanna, and Western Railway Company has railway outlets east to the bay of New York and north into western New York.

The Pennsylvania Coal Company, over the Erie road, has outlet to Jersey City and Newburgh.

The Delaware and Hudson Canal Company will have outlet to Albany, over the Albany and Binghampton Railraad.

The three New York companies, in fact, are arranging with a view to facilities for competition in western and northern New York as well as in the tidewater market.

The distance from Carbondale to Lanesboro is 38 miles. The distance from Lanesboro to Oneonta we do not know. But the fact that the Delaware and Hudson Canal Company—an opulent and powerful corporation—is in combination with the Albany & Susquehanna Railroad Company, is surety that the link needed between Carbondale and Oneonta will be built.—*R. R. & Mining Reg.*

Two passenger trains per day now run through between Augusta and Savannah. The fare is $8. Trains leave Augusta at 9.30 A. M. and 8:45 P. M.

### Trade Relations of Great Britain and the United States.

Any sudden trade is a dangerous trade. And a sudden trade in which we credit largely is a particularly dangerous trade. On these two grounds we would add our warning to other rather loud warnings which are addressed to American exporters. A very quick trade is rarely a very cautious trade, and therefore we advise them to *consider*. But though we to this extent agree with the warners, there are some counter considerations which must not be overlooked, and which go far to mitigate any national anxiety. People who do bad business with America will lose their money as those who do bad business with other coutries, or at home. But if we manage properly ourselves, we do not believe their bad business need hurt us.

1. The amount of the exports must not be exaggerated. We have only the returns up to the 31st October, made up completely between country and country. For November, only the exports of the principal articles are yet published; that of the minor miscellaneous though in the aggregate very influential articles, are not yet known. But up to the 31st of October we had exported to America:

| | |
|---|---|
| In 1864 | £15,403,017 |
| In 1865 | 14,844,704 |

So that we were all right up to the 31st October; all the mischief which is done must have been in the ten weeks since, and no national harm can have happened in that time.

2. It is not likely that the aggregate export of 1865 will be as great, or nearly as great, as that of 1860, the last year before the American civil troubles. In 1859, our exports to America were were £24,417,000 in two months; the trade of 1865 will still be less than that of 1859. And the extreme alarmists do not put the exports of November and December at nearly as much as nine millions and a half.

3. The non payment of these exports must not be taken for granted. Our accounts of exports and imports are made up on different principles. That of exports is an account founded on the merchants' declarations, which is often very carelessly made. The account of imports, which is always a month in arrear, is carefully made up by the Board of Trade Department, and is much more accurate. Two accounts so differently made up need not, and will not, balance precisely. Other considerations, too, affect the matter. It is well known that the Americans have had large deposits in London, because America, with a fluctuating currency, was no good place for deposits. These are now withdrawn. Since the peace, too, England and Europe have been large buyers of American securities, and these railway debentures and five-twenty bonds are, in fact, the imports which balance our exports.

4. It would be contrary to all reason if a sudden increase of an export trade were at once balanced by a sudden increase of the opposite import trade. All sudden trade, to some extent, deranges the common and arranged balance of trade.

5. What is most important of all, even if the Americans should neglect to pay those who deal with them, as they did neglect to pay in 1836 and 1857, we need not and shall not, as a nation, suffer as we suffered in 1836 and 1857, unless we ourselves act as absurdly as we did then. It was not American nonpayment that caused the panic, but that nonpayment (and other adjuncts) happening when we were unprepared to meet it. We had unduly diminished the basis of our credit.—

T e bank-till was too low, and the first accident was sure to cause disaster But if we, as a nation, keep a sufficient basis for our pecuniary liabilities, we shall, as a nation, get on well and retain our credit, though more or fewer American exporters may happen to be ruined. It was not the strength of the American blow that leveled us before, but our own weakness at the moment when it struck us.—*London Econ.*

### Railway Traffic.

The January traffic on the New York roads is quite equal to last year. The Central will probably run ahead $70,000; the Erie, it is reported, will make a larger increase. In the West, the Cleveland & Pittsburg will be equal to January, 1865; the Fort Wayne will probably fall behind, as some of the Illinois roads will, wanting the military business of the seasons of 1864 and 1865. This business, by the way, was never so profitable in its net result as the ordinary trade and passenger business of the country. The rates allowed by the War Department were not over 66⅔a75 per cent. of the ordinary tariff of charges, and very frequently the Western lines were subject to great inconvenience, as well as loss of trade traffic, by sudden and arbitrary demands upon their equipment for military transportation; their locomotives often seized and sent off the lines, and their freight, emigrant, and passenger cars monopolized, when most needed for other business.

Another fact should not he lost sight of in favor of the present winter season for the railways. The weather is and has been highly favorable for uninterrupted traffic, as compared with last year. We are now so far through the winter as to speak with confidence on this point, on the assurances of the leading directors of the New York roads.—The operating expenses in the present January are known to he reduced from 10 to 20 per cent The saving in labor, material, &c., on the Hudson River is $30,000 on the expenses of January, 1865; and on the Erie road a prominent director expressed the opinion to us this morning that in fuel, repairs, &c., the saving in January will be nearly one third. We hear similar accounts indirectly from the New York Central. Should the present weather continue, and no freshets occur in March, the net revenue of the Erie and Central hence to the first of April will be all of a million and a half dollars over the operating expenses and costly repairs of last season.

We are aware that rumors are circulated on the street in reference to the Baltimore & Ohio and Western Roads, of damaging competition for business and cutting of rates, so far as their through traffic east and west is concerned. How far these may be substantially founded we are not advised. Such difficulties are generally exaggerated, and it will probably be found that in the net results of 1866, taking reduced expenses into the account, the roads generally will be as able to maintain their dividends as in 1865. In the number of trunk lines, it is quite certain there has been no increased competition for several years, and it is about as sure that the business of the country has not fallen off.—*N. Y. Times.*

Erie & Pittsburg Railroad.—The Erie Dispatch says W. S. Brown will shortly resign the Superintendency of the Erie & Pittsburg Railroad, and will be succeeded by Mr. J. J. Lawrence, now Superintendent of the middle division of the Philadelphia & Erie Railroad.

### Kentucky—her Minerals.

Argentiferous galena, or the double sulphite of lead and silver. has been found in several counties in the State. This ore generally presents a somewhat different appearance from the ordinary galena. The crystals are smaller and have a slightly purplish appearance. Dr. Peters examined specimens that would yield thirty two ounces of silver to the ton of ore. The extraction of silver from an ore containing that proportion of metal would yield a handsome profit; especially where the ore is abundant and the fuel cheap. The extraction of silver is a profitable operation, even when the ore does not yield more than three ounces of metal to the ton.

The extraction of metallic lead from the sulphide of lead is a comparatively inexpensive operation. Where the ore is heated, the only reducing agent required is a small quantity of lime. When copper, zinc and iron are extracted from their respective ores, it is necessary to employ charcoal, or some form of carbon as a reducing agent

The separation of silver from lead is based upon the fact that an alloy of lead and silver is more fusible than pure lead. In the act of consolidation, the pure lead crystalizes before the alloy of silver and solidifies, and is removed by a perforated ladle. The silver is obtained from the alloy by the process of cupellation. Six hundred thousand ounces of silver are thus obtained annually in Great Britain alone. Large quantities of argentiferous galena are submited to this operation on the continent of Europe, also. In fact, a large proportion of the silver used as a circulating medium, and much of that employed in the manufacture of plate and for other purposes, is extracted from argentiferous galena. To convey some idea as to the importance of this branch of metallurgy, it is stated that large quantities of argentiferous galena were shipped from Arkansas to Europe, in its crude state, solely on account of its richness in metallic silver. The extraction of silver can be effected as economically in the United States as in Europe, and there is no reason why such an important source of profit should fall into foreign hands.

Ores of zinc have been found in Estill, Monroe, Woodford, Crittenden, and several other counties in Kentucky. Sulphuret of zinc, or blende, sometimes termed by miners, black jack, is the ore that is most frequently found in this State. Carbonate of zinc, or calamine, has also been recognized. This branch of mineralogy. like that of the ores of lead, has received but little attention in this State, and as to the probable yield of ore in the localities in which it has been found, I am not prepared to give a definite account. As most of the deposits are in vertical veins, and not parallel with the planes of stratification, they will probably increase in richness as the excavations deepen.

The extraction of zinc from its ores has, until a comparatively recent time proved immeasurably unsuccessful in the United States. Many difficulties have been overcome recently, and the reduction of zinc ores has become an important branch of metallurgic manufacture.

Metallic zinc is obtained from both the sulphide and carbonate of that metal.—*Louisville Gazette.*

The steel-works in the city of Pittsburg produce about one-half of the steel manufactured in the country. The capacity of the works is not less than 48,000 tons per annum.

### Corporate Elections.

Most of our monetary corporations have just passed through the shams, popularly known as their annual election for directors. These occasions are, as a general rule, specimens of broad farce —the exceptions being frequent, however, in the form of revolutionary schemes organized for the ousting of an unpopular President, or the advancement of an ambitious subordinate. The constituency of one of these corporations, for instance, comprises the holder of from three thousand to ten thousand shares of its capital stock, according to the size of the institution and the par valuation of its shares. Each share represents a vote, and the larger stockholders can exercise, as a matter of course, considerable influence at elections, if they will take the trouble to attend and vote. But this they rarely do. In fact, it is seldom the case that one-fifth of the capital is represented when the annual elections take place, and it is safe to suspect an "impending crisis" when one-third of the stock is voted upon. Some radical change, or the existence of a fierce competition may be predicated of the casting of so large a vote as this. The usual *modus operandi* is for an outgoing Board to appoint a nominating committee from their own number, whose report is simply a re-nomination of the old Board, with perhaps, a new name or two to fill vacancies. The election day, or rather hour, is then duly advertised in one or two papers and, on the day named, the President, two inspectors and half a dozen directors, with here and there a private stockholder, go through the formal farce of taking up the printed list of old directors and depositing the same in the hat, cheese-box or what not—as their ballot for new directors. Occasionally a cold collation is part of the affair; then the result is duly announced in the newspapers, and all is over. All told, perhaps five hundred shares of stock, out of an aggregate of several thousand, thus decide who shall govern the institution for another year. Now and then, however, some cross-grained Director or aspiring Vice-President, Cashier or Secretary troubles the quiet waters by running an opposition ticket, with a view to defeating another Director, or supplanting the President. If managed shrewdly, the deed is done before its possibility is suspected, and simply by introducing, just as the polls are about to close, a heavy stockholder or two—or a few hundred shares in proxy votes, whereby the regular ticket is overset and a *coup d'etat* effected. Such things occur every year in Wall street. Presidents are suddenly left out in the cold when all seemed to be going as merrily as a marriage bell, and all has been done too, in the most legal and regular way. An actual occurrence will amply illustrate the ease with which sinister designs can be executed at corporation elections where stockholders are so indifferent to their responsibilities and interests. Not long since, one of the staunchest and most conservative corporations in Wall street, whose stock sells at a quotation far above par, held its annual election for directors. An entire Board was to be chosen—the company not favoring the newfangled, but sensible invention, by which only one half or one-third of the Board retire yearly. During most of the time the polls were open, the only votes cast were those of the President of the Company and of the two inspectors of election, unitedly amounting to about one hundred shares. Just as the hour was expiring, a stockholder was observed passing the door, and the President, somewhat

ashamed of the small number of votes, dispatched a clerk to invite the forgetful stockholder in, to exercise the glorious privilege of a freeman, &c. The gentleman accepted the invitation, and after depositing the regular ticket in the hat, went on his way rejoicing. The number of shares represented by that last vote was largely in excess of the entire vote previously polled, and had the voter known enough, or been so disposed, he could have elected a totally different Board of Directors, and secured for himself or some more needy relation, the Presidency of the Institution. In other cases, an insurance Secretary, by quietly gathering proxies and organizing an opposition party, has been known to so change the anticipated returns of the election as to secure to his President a front seat on the ice, while that personage was innocent of the least suspicion that such cool treatment had been intended and predetermined. Under these circumstances, it may not seem surprising if the incumbents in high positions in our monied corporations always breathe easier after the annual election farce is played out, and their lease of place secured to them for another year. Thus the Presidencies of most of our banks, trust companies and insurance companies have been fixed for 1866—within the past few weeks—and this particular agony is over until next January brings the election season round again.—*Cor. Cin. Commercial.*

New York Central Railroad and the West Side of the Hudson River.—In the "Assembly," at Albany, on Monday, Feb. 5, a bill was introduced "To authorize the New York Central Railroad Company to subscribe capital to a railroad from Athens to Newburgh, on the west side of the Hudson river."

Newburgh is 61 miles above New York and 24 miles below the outlet of the Delaware and Hudson Canal. The New York Central Railroad Company are now at Athens, 30 miles below Albany, and 30 miles above the junction of the Delaware and Hudson Canal with the Hudson river. Hence the proposition to authorize the New York Central Railroad Company to subscribe for stock to build a road to Newburgh, will carry the influence of that company 84 miles below Albany, to the Pennsylvania Coal Company's rail terminus at Newburgh.

What interest will supply the link between the Hudson river and the Delaware river, on a route parallel with the Delaware and Hudson Canal, time will soon disclose.

The valley of the Delaware river is in the direct line of future extension of the Belvidere Delaware Railroad to Port Jervis. And so, link by link, the eligible routes for ironways on the Delaware and the Hudson, and their tributaries, are fast undergoing occupation, under the policy of progression administered by leading railroad corporations.—*R. R. & M. Register.*

### Railroads in Pennsylvania.

Pennsylvania contains 3,800 miles of railroad in operation, of which about 1,500 miles are east of the Susquehanna river, in about one third the geographical area of the State. The present necessities of Pennsylvania are equal to more than five thousand miles of railroad, and in a very few years the aggregate mileage will exceed that limitation.

Massachusetts has in operation 1,300 miles of railroad in 7,800 miles of territory, being one mile of rail to six miles of area. Pennsylvania has only one mile of rail to twelve and a third miles of area. Hence it would require about *eight thousand miles of railroad* to open up throughout Pennsylvania equal facilities to Massachusetts.

Moreover, Pennsylvania being *between* the great seaports and the interior country, and having wonderful mineral riches throughout its whole extent, is in a position to command and contribute more tonnage according to size, than Massachusetts. The impossibility, therefore, of frustrating plans for building railroads that will develop important local interests, and thereby add to the common prosperity and profit of the Commonwealth, must be apparent to all minds that give the subject calm reflection. Embarrassments may be interposed and hindrances thrown in the way of new enterprises, even where they may be backed by influences having the necessary capital at command, but such checks can only be temporary, and may in the end, in some cases, plague the inventors.

The Commonwealth is paramount to any railroad corporation created by it, just as the Union is paramount to any State within its fold. There is room for more States in the Union, and for more railroad corporations in Pennsylvania. And as the great States prosper in the Union, in like manner will the great railroad corporations prosper in Pennsylvania.

### How to Determine where Water is.

A gentleman related his experience in this matter. An Irishman in his employment, in order to ascertain where he ought to dig to obtain water soonest, got a stone and buried it over night in the ground, next to the hard pan. In the morning he found it quite moist, but not sufficiently to suit his fancy. Next night he tried it in another spot and it was found very wet on the following morning. "There," said Patrick, "you will find water not many feet deep, and plenty of it." Sure enough, in a few days' digging, Patrick confirmed his prediction, notwithstanding the jeers of the workmen, finding a vein which filled the well to overflowing, and rendering it exceedingly difficult to bail out the water so as to stone it. The philosophy of the operation seems to be, that as the great evaporation takes place from the surface of the earth during the night, water rises up from the depths below to supply the loss, and accumulates in the vicinity of the stone, often making quite a puddle.—*Am. Inst. Farmers' Club.*

Between Cape Clear in Ireland and the Great Amoor River in Asia there is an unbroken line of communication; also between Fraser's River in British Columbia and New York. These lines are about 14,000 miles in length, leaving a gap in the belt of communication round the world of about 6,500 miles.

Car Wheel.—It has been found desirable in railway practice that, with the exception of the driving axle of the locomotive, the car axle should have one of its wheels loose thereon, in order to facilitate the turning of short curves; but the efficiency of such an arrangement has always been impaired by the fact that, as heretofore constructed, it has been difficult to properly lubricate the journals. The oil has not been prevented from escaping therefrom, thus causing much needless expense for lubricating material; and, furthermore, dust and "grit" penetrating between the hub and axle have caused by their abrading action the rapid deterioration of the wearing surfaces of the same. This invention is designed to obviate these objections, and consists in a novel arrangement of parts by which a car wheel loose upon its axle has its journal automatically supplied with a proper quantity of oil, which is prevented from escaping and being wasted, and by which dust or dirt is effectually excluded from the journal; thus materially reducing the expense of using this class of car wheels and enabling them to be used with perfect success. George Sewell, of Brooklyn, N. Y., is the inventor.—*Am. Artisan.*

### New Tramways in London.

Among the 663 bills filed for consideration in the approaching session, there is one entitled "Metropolitan Tramways," that strikes us as being curious in various respects. Whether this is Monsieur Train come again we know not, for there are no names on the bill, except those of the solicitor, the parliamentary agents, and the printer. It is usual, as our readers may be aware, to mention in bills the names of a few of the promoters. The company promoting this new bill, it informs us, was incorporated in 1862. It now proposes the construction of the following tramways: 1. The Holloway and Finsbury Tramway, from Upper Holloway *via* the Holloway road, High street, Islington, and City road to Finsbury square. 2. The Islington and Tottenham Court road Tramway, from Seven Sisters road, Camden road, High street, Camden Town, to the south end of Tottenham Court road. 3. The Edmonton and Kingsland Tramway from Lower Edmonton to the south end of Kingsland Green, and—4. The Stratford and Whitechapel Tramway, from Stratford New Town, *via* the Grove, Broadway, Stratford road, High street, Bow, Bow road, Mile End road, Whitechapel road, Whitechapel, High street, to the end of Middlesex street. This *incognito* company further suggests that "it is expedient that the company and the street authorities of the metropolis, be empowered to enter from time to time into agreements for the construction by the company of the tramways in such situations as are suitable." Some of the provisions as to the breaking up and reinstatement of streets are refreshingly cool. In breaking up streets the company will give 48 hours' notice, "except in case of emergency," when they will give notice "as soon as practicable after the same is begun." As to restoring the streets, the company will do so "with all convenient speed;" but that their convenience and that of the public will coincide we greatly doubt. It may be that this bill will become an act, and that it will cut the gordian knot of street blocks, but we can not see the matter in this light in anticipation; meanwhile we shall be glad to be informed whether this is an American scheme, and whether Mr. George Francis Train is connected with it.—*Engineer.*

Manasses Gap and Winchester Railroad.—We understand that seven hundred and fifty thousand dollars is the estimated cost of the Manasses Gap and Winchester and Potomac Railroad connection, and that this sum is to be subscribed by the Baltimore & Ohio Railroad Company. Of this amount, it is said, four hundred thousand will complete the proposed connection, leaving three hundred and fifty thousand dollars to be expended in rebuilding and refurnishing the Manasses Gap Railroad. We hope this may be true.—*Alexandria (Va.) Gazette.*

### Camden & Amboy.

The Camden & Amboy Railroad corporation has its grip upon the New Jersey Legislature again this winter. The following was offered in the House of Assembly, of that State, on the 30th ult.:

"Whereas, It is widely reported and generally believed that the several railroad companies of this State have secret contracts with each other, the terms of which are against public policy, and the practical effect of which is to burden the people with high rates of fare, both in travel and freight, while the actual facilities of travel and transportation, so far as our people are concerned, are greatly diminished; therefore,

"*Resolved*, That the Attorney General be, and he is hereby, directed to call upon all railroad companies in this State to submit true copies of all contracts and agreements now made and existing between any of such railroad companies, and any other railroad, whether in this State or not, which relates to passengers and freight, and that as he receives the same he shall lay them before this House, with his written opinion theron, as to wheter the same are contrary to the common law principles of public policy; and whether they tend to burden inter-State commerce, giving his reasons therefor; and in case any railroad company, being thus called upon by the Attorney-General, shall neglect or refuse, for 20 days after such call, to comply with the same, he shall forthwith report their names to this house."

The preamble and resolutions were lost—public policy receiving only fifteen votes while Camden & Amboy succeeded in scoring thirty five.

### N. Y. Underground Railways.

The underground railroad project, about which we have been so much exercised, is in danger of premature death. After all the theorizing and speculation—backed by any quantity of estimates, specifications and expert opinions—which bave been expended in educating public opinion up to concert pitch on the snbject, the thing has experienced a terrible set-back in the shape of a report made by the Chief Engineer of the Croton Water Department, against the possibility of tunnelling Broadway without interfering with the city's supply of water. The report paints, (in water colors, of course, but very vividly,) the probabilities of a scarcity, or, at all events, frequent interruptions, in the supply of Croton for comestic, manufacturing and fire extinguishing purposes, and unless the undergrounders can tell the Legislature how they propose to tunnel our city, without interfering with the Croton pipes, we may as well bid good bye to that kind of a railroad.

CHICAGO, Feb. 7.

Judge Smith, of the Third Judical District of Iowa, has just rendered a decision in the case of Mills County against the Burlington & Missouri Railroad Company, which is one of the largest, if not the largest case ever tried in that State. It involved the title to more than 23,000 acres of land, and the decision is in favor of Mills county, the plaintiff in the case.

Sixty thousand dollars, the amount required, has been subscribed by the people of Keokuk county, Iowa, to secure the location of the St. Louis & Cedar Rapids Railroad through that county.

### Railroad Earnings.

The increased earnings of the principal railroad lines in this country during the year 1865 over the gross receipts in 1864 may be be seen in the following table:

| | Gross Earnings. 1864 | 1865 |
|---|---|---|
| New York & Erie | $13,4-9 643 | $14,943,299 |
| Michigan Southern | 4.067 533 | 4.785.988 |
| Michigan Central | 3,955,007 | 4 520.545 |
| Illinois Central | 6,329.447 | 6.841.814 |
| Chicago & Alton | 2 905.624 | 3.703 116 |
| Chicago & Rock Island | 2,884.426 | 3,273 853 |
| Chicago & Northwestern | 5,865.4-5 | 7 866,466 |
| Marietta & Cincinnati | 1 026 135 | 1,222.017 |
| Philadelphia & Reading | 9,269.341 | 11,142,519 |
| Pitts., Ft. Wayne & Chicago | 7,120 465 | 8 392 000 |
| Atlantic & Great Western | 3,709,970 | 6,368,163 |
| Norwich & Worcester | 550,00 0 | 714,057 |
| North Pennsylvania | 750,034 | 875,064 |
| Racine & Mississippi and Northern Illinois | 587,077 | 659 388 |
| Eastern Massachusetts | 1,063,741 | 1 277 075 |
| Boston & Maine | 1,272 602 | 1,393,848 |
| Boston & Providence | 1,471 985 | 1,921,104 |
| Boston & Lowell | 636.881 | 752.605 |
| Fit hburg | 865 372 | 909,693 |
| Old Colony | 964,080 | 1,269,058 |

### Injunction Granted to the Oil City & Pit Hole Railroad.

The case of the Oil City & Pit Hole Railroad Company vs. The Warren & Franklin Railroad Company, was decided by the Court of Common Pleas, in session at Franklin, in favor of the plaintiffs, on Wednesday last. The suit brought by the Pit Hole & Oil City Railroad Company, for the purpose of obtaining an injunction restraining the Warren & Franklin Railroad Company from hindering the building of the Oil City & Pit Hole Railroad. The snbject of charter rights and privileges was thoroughly examined, and the case ably argued on both sides. The testimony and pleading occupied an entire day. On Wednesday morning his honor Judge Campbell gave his decision, granting to the Oil City & Pit Hole Railroad Company a preliminary injunction, thus restraining the Warren & Franklin Railroad Company from interfering in any way with the building of the Oil City & Pit Hole Railroad. We think this decision a sound one. No effort was spared by the defendants to gain their cause, and in view of the searching examination had, it argues well for the validity of the claim of the Oil City & Pit Hole Railroad Company. As an impartial judge and able lawyer, Judge Campbell has no superior. Heydrick and Snowden were counsel for the plaintiffs, and Messrs M'Calment for the defendants. Parties who heard it, speak in the highest terms of the able argument made by Mr. C. Heydrick, counsel for the plaintiffs This gentleman occupies a high position in his profession. We trust that this decision may prove a final one.—*Oil City Reg.*

### Bituminous Coal.

The extent of the bituminous coal field surrounding Pittsburg, is fifteen thousand square miles, or eight million six hundred thousand acres. The upper seam of coal in this area rating at an average depth of eight feet, is estimated to contain 53,516,430,000 tons of coal, which, at two dollars per ton, or a little over seven cents per bushel, would be worth $108,032,860,000—a sum equal to the payment of the national debt nearly twenty-seven times, supposing it to be four thousand millions; or an amount equal to the gold and silver products of California and Nevada for more than a thousand years, even if they yielded one hundred millions annually.

### Reversion of Railroad Grants.

The House Committee on the Pacific Railroad on the 7th, had under consideration the Senate bill extending the time for completing railroads in the States of Iowa, Alabama, Louisiana, Arkansas, Florida and Mississippi. The Committee struck out all the Southern roads, leaving Iowa alone to receive the benefits of this measure. All those roads have large grants of public lands, which, unless the time is extended, reverts back to the Government. Iowa, however, is the only State which is to be benefited. The Committee adopted an amendment to the bill, providing that all roads having land grants, which are not completed by the year 1868, settlers may take possession of such lands, and pay the companies holding the lands a specified sum therefor. The object of this is to prevent the nonsettlement of lands on account of the failure of railroads to comply with these grants.

### New York Central Railroad.

A correspondent of the Springfield Republican says the New York Central Railroad is a great organization, and apparently carefully managed. It exteuds 313 miles, from Albany to Buffalo, most of the way with double, and often quadruple track. From fifty to fifty-six trains pass one way or the other daily, though its heaviest season is from September to November. Twenty-six conductors, each with a different special ticket punch, ply between Albany and Syracuse. It has 257 engines, 366 passenger and baggage cars, and 2,254 freight cars. It carried 3,783 263 passengers last year, at an average of about two cents fare a mile, and at an average rate of speed of 28 miles an hour. It has a capital stock of twenty four and a half millions, and a funded debt of fourteen and a half millions of dollars. Its earnings last year were $13,975,524, and its expenses $10,882,358. The Empire State may justly be proud of this portion of her public works.

### Railroad Projects.

There are not less than three railroad projects under discussion by our Michigan neighbors, in all of which Toledo is greatly interested. By two of the projected roads it is contemplated to connect our city with Saginaw, and with the other to open more intimate business relations betweenour citizens and the rind River Valley section of the Peninsula State. The first we shall name, it is designed, if built, to call the Monroe, Wayne & Holly Road, and to run from Monroe to Wayne and thence to Holly and Saginaw; the second to leave the same northern terminus, but to run direct from this city to Petersburg and Dundee, in Monroe county, thence to Saline, and crossing the Michigan Central Road at Ann Arbor, be continued to Holly and thence to Saginaw; the third is called the Grand River Valley Road, and will extend from Jackson, Michigan, to Eaton Rapids, and continuing northward to Grand Rapids, thence to Muskegon Lake.—*Toledo Blade.*

The last great railroad project that we have heard of is the one for a road from St. Paul to the settlements in the Hudson Bay Company, in British America. This proposed route is in the hands of eminent British capitalists, who propose to extend it down the Mississippi as far as Winona.—*Mil. Wis.*

THE STOCKTON AND COPPEROPOLIS R. R.—Richard Ivers, Esq., one of the proprietors of the Vulcan Iron Works, in this city has, in connection with G. D Nagle, taken the contract to build the Stockton & Copperopolis Railroad. The contract price is $1,250,000. The road will he completed in three years; the cars will probably be running on a portion of the track by next September.—*San Francisco Press, Jan.* 6.

The Macon (Ga ) Telegraph says: The appointment of Wm M. Wadley President of the Central railroad has proved a good investment for the stockholders, who have made by it more in ten days than they will pay out as his salary in ten years. The high reputation of Mr. Wadley as a railroad manager gave immediate buoyancy to the Company's stock, causing it to advance in the market from 68 to 75 cents.

## MONETARY AND COMMERCIAL.

There is every prospect that with the opening of spring, a brisk trade will be inaugurated, to compensate for the dullness that has oppressed business so long. The advices from the South are very encouraging, and the demand for laborers can not be fully met.

Gold bas declined, probably from the rumor that the Secretary of the Treasury is about to sell twenty million of gold. We quote:

| | Buying. | Selling. |
|---|---|---|
| 5-20's, old | 102¾@103 | 103¼@103½ |
| 5-20's, new | 102¾@103 | 103¼@1 3½ |
| 10-40's | 94⅝ | 95 |
| 7-30's, August | 99⅛ | 99⅜@100 |
| 7-30's, June | 99¼ | 99⅝@ 99¾ |
| 7-30's, July | 99¼ | 99½@ 99⅝ |
| Certificates | 98⅝ | ... |

Exchange ruled very firm at 50 prem. buying, and 1-10 prem. selling. Some of the bankers shipped currency yesterday and to day. Gold declined, under advices from New York, to 137¼@137½ buying, and 137¾ selling. We quote:

| | Buying. | Selling. |
|---|---|---|
| New York | 50 prem. | 1-10 prem. |
| Philadelphia | 50 prem. | 1-10 prem. |
| Boston | 50 prem. | 1-10 prem. |
| Gold | 137¼@137¼ | 137¾ |
| Silver | 128@130 | 130@132 |

Railway stocks have advanced, the improvement in some shares being as much as 3 per cent., as will be seen below:

| | Wed. A. M. | Wed. P. M. | Thrs. A. M. |
|---|---|---|---|
| U. S. 6 per ct. Bids, 1881 | 104 | 104 | 104¼ |
| " 5 20 " old | 102¾ | 103 | 103⅛ |
| " 5-20 " 1864 | 102¾ | 102⅞ | 103 |
| " 5-20 " 1865 | 102¾ | 102⅞ | 103 |
| " 10 40 " | 94¼ | 94⅜ | 94½ |
| " One year Certificates | 98⅛ | 98⅜ | 98⅜ |
| 7-30s, 1st series | 9 ⅜ | 9⅜ | 98⅛ |
| 7-30s, 2d series | 99¼ | 9.⅜ | 99⅜ |
| 7 30s. 3d series | 99¼ | 99⅛ | 99⅛ |
| New York Central | 88⅜ | 88⅝ | 89 |
| Erie | 78¼ | 78⅝ | 78 |
| Hudson River | 101 | 101⅜ | 103¼ |
| Reading | 100¼ | 100⅝ | 100⅜ |
| Michigan Central | 102 | 102⅜ | 102⅜ |
| Michigan Southern | 69½ | 69⅝ | 69⅜ |
| Illinois Central | 114½ | 114 | 114⅜ |
| Cleveland & Pittsburg | 80½ | 80⅝ | 81⅞ |
| Chicago & Northwestern | 27⅜ | 27⅞ | 28⅛ |
| " " pref | 55¼ | 55⅝ | 56⅛ |
| Cleveland & Toledo | 107 | 106⅜ | 10 ⅛ |
| Rock Island | 10 ⅞ | 104⅜ | 106⅛ |
| Pitt. Ft. Wayne & Chicago | 92½ | 02⅜ | 93⅛ |
| Ohio & Miss. Certificates | 26¼ | 26⅜ | 26⅜ |

The recent severe cold weather has had its usual effect on railroads, and we hear of accidents and delays on all sides. It has made the transaction of out-door business nearly impossible, in this city, and was as unexpected, as it is disagreeable.

### Railroad Earnings.

The Michigan Central Railroad for the fourth week in January shows a decrease of $1,885; for the month the decrease is $23,886.

The Great Western Railway of Canada earned for the week ending Feb. 2, 1866:

1866...$60,282 36 | 1865...$51,673 42½ | Inc...$8,608 93½

The gross earnings of the Milwaukee and St. Paul Railway Company, exclusive of the eastern division of the La Crosse Railway, were:

1864.....$1,402,106 | 1865.....$2,525,000
Jan. 1864....$51,965 | 1865....$98,181 | 1866....$132 000
Increase over 1865 in 1866, $33,819.

Receipts of the Western Union Railroad Company for the week ending Jan. 31, were:

1866...$15,989 53 | 1865...$10,993 24 | Inc....$1,996 29

Receipts from Jan. 1 to Jan. 31:

1866...$45,101 64 | 1865...$43,715 73 | Inc....$1,385 91

The earnings for the Chicago & Northwestern Railway Company for the fourth week in January, were:

1865....$150,647 27 | 1866...$160,589 49 | Inc...$9,942 22

The Detroit & Milwaukee Road earned the fourth week in January:

1865.....$17,086 | 1866.....$23,814 | Inc.....$7,628

The Michigan Southern earned the fourth week in January:

1865.....$111,112 | 1865.....$106,863 | Dec.....$4,249

The Chicago & Rock Island Road earned the fourth week in January:

1865..... $57,948 | 1866..... $69,704 | Inc.....$11,756

The Illinois Central Road shows a gain of $36,000 on its January traffic.

The Chicago & Northwestern Railway earned for the fourth week in January:

| | |
|---|---|
| 1866 | $160,589 49 |
| 1865 | 150,647 27 |
| Increase | $9,942 22 |

The net earnings of the New York Central Company in January are:

| | |
|---|---|
| 1866 | $1,104,000 |
| 1865 | 958,090 |
| Increased earnings | $ 146,000 |

Hudson River receipts and expenses for fiscal years ending January 30, 1864 and 1865.

RECEIPTS.

| | 1865. | 1864. | Variations. |
|---|---|---|---|
| Passengers | $2,099,951 72 | $1 911 964 13 | $187,987 59 Inc. |
| Freight | 2 224,030 08 | 2,142 301 05 | 81 729 03 " |
| Other sources, | 128,398 36 | 68,334 87 | 60 063 49 " |
| Total | $4,452,380 16 | $4,132,600 05 | $429,780 11 |

PAYMENTS.

| | 1865. | 1864. | Variation. |
|---|---|---|---|
| Transport'n | $3,176,612 45 | $2.545,300 88 | $631,305 57 Inc. |
| Roadw'y, grading, bridges, engines, &c. | 537,613 16 | *485,200 03 | |
| Interest | 281,100 00 | 594,497 92 | |
| Dividends, 8 per cent. | 329,403 25 | 499,286 80 | |
| Cash on hand, | 2,069 52 | ..... | |
| Total | $4,326,800 38 | $4,124,281 63 | |

* Representing earnings borrowed and for which scrip was issued, less $43,270 03 credited to surplus fund.

STOCK AND DEBTS.

| | 1865. | 1864. |
|---|---|---|
| Stock | $5,561,250 38 | $6 218,041 89 |
| Bonds | 7,762,840 00 | 7,737,680 00 |
| Floating debt | 1,167 00 | 1,167 00 |
| Total | $14 327,257 38 | $13,956,883 89 |

Increase, $370,368 49.

Harlem Railroad earnings and expenses for fiscal years ending September 30, 1864 and 1865.

EARNINGS.

| | 1865. | 1864. | Variations. |
|---|---|---|---|
| Passengers | $1,053,314 49 | $735,466 39 | $318 153 10 Inc. |
| Freight | 1 193,068 01 | 861,558 19 | 229,109 85 " |
| Other sources, | 362,643 00 | 260,709 12 | 102,033 97 " |
| Total | $2,509,725 62 | $1,860,428 70 | $649,296 92 " |

or 33 per cent.

PAYMENTS.

| | 1865. | 1864. | Variation. |
|---|---|---|---|
| Transport'n | $1,874,677 67 | $1,409,220 33 | $461,657 34 Inc. |
| Interest | 429,265 50 | 432,439 28 | |
| Bridges, shops, &c. | 212,719 61 | ..... | |
| Surplus | 2 062 84 | 18,068 39 | |
| Total | $2,509,735 62 | $2,860,426 70 | |

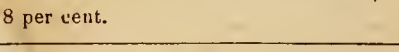
STOCK AND DEBTS.

| | 1865 | 1864. |
|---|---|---|
| Stock | $6,585 050 | $6.585,050 |
| Bonds | 6,098,045 | 6 115 800 |
| Total | $12,683,095 | $12,700,850 |

A decrease of $17,755 or the equivalent of the item credited to surplus.

The figures of these two roads are very suggestive. The Harlem increases its gross earnings $649,296, or 33 per cent., against an increase on the Hudson River of $329,870, or 8 per cent.


## The Old And Reliable Route.



**Through to Pittsburg without Change.**

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

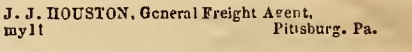
H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

## Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway



WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P. M.
Arrive at Cincinnati.....6:30 A. M., and 7:30 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenge Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D. McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

# RAILROAD OFFICES AND AGENTS

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F Lord General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A B Waters, Freight and Ticket Agent, Cor. Third and Walnut

**Ohio & Mississippi**

W. E Bruce. Freight and Ticket Agent, Gagette Building, 82 West Fourth Street
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N Kinney, General Freight Agent, East Front St. Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayton & Michigan.**

J R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg, Contracting Agent, Vine St. under Burnett House.
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 63 W. Third St.
Sydney Rice, Contracting Agent, " "

**Central Ohio & Pittsburg, Columbus and Cincinnat**

James E Shields, General Agent, No 77 W. Third St.

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A J. Dey. S. W Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J. W. Burch, General Eastern Agent, No. 2 Burne House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burnet House.

**New York Central.**

G. B Gibson. S. W. Passenger Agent. W. H. Page, Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freigbt Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Pittsburgh, Fort Wayne and Chicago.**

H. W. Brow & Co., Contracting Agents, Broadway, opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent. No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**
Depot in Covington.

# 1865.

## CHANGE OF TIME!

By the Broad Road Gauge Route, the

# Atlantic & Great Western R'y.

## TWO THROUGH TRAINS DAILY

TO

## EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI | 9:00 A. M. | 10:40 P. M. |
| HAMILTON | 9:57 " | 11:43 " |
| DAYTON | 11:30 " | 12:55 A. M |
| SPRINGFIELD | 12:35 " | 1:45 " |
| URBANA | 1:40 P. M. | 2:15 " |
| GALLION | 5:25 " | 6:10 " |
| MANSFIELD | 6:50 " | 7:15 " |
| AKRON | 9:30 " | 10:00 " |
| RAVENNA | 10:25 " | 0:40 " |
| LEAVITTSBURG | 11:00 " | 11:40 " |
| GREENVILLE | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE | 1:20 " | 2:30 " |
| CORRY | 2:45 " | 3:55 " |
| Arrives SALAMANCA | 4:58 " | 2:55 " |
| NEW-YORK | 10:30 P. M. | 1:00 " |
| BOSTON | 2:30 " | 8:00 A. M. |
| PITTSBURGH | 2:20 A. M. | 3:20 P. M |
| HARRISBURG | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA | 5:35 " | 6:55 " |
| BALTIMORE | 5:45 " | 7:00 " |
| WASHINGTON CITY | 9:05 " | 10:35 " |

The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS { At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

## THIS IS THE ONLY ROUTE

TO THE

## OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

### SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

**Ample time is allowed, at all hours, for meals.**

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

### CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast cornor of Broadway and Front streets, and at No 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, CHAS. COOK, } Passen Agents.

# CENTRAL RAILROAD
—OF—
# NEW-JERSEY,

Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Eas on with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New-York as follows:

At 6:00 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 1:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Mauch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening

ELIZABETHPORT AND NEW-YORK FERRY—Leave New-York from Pier No 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

# NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; 4:30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) 3:45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:30 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8:00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a.m. (Ex.); 3:00 (Ex.); 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); 3 a. m. (Ex.); 3:00 (Ex.); 12:15; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railrosd, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

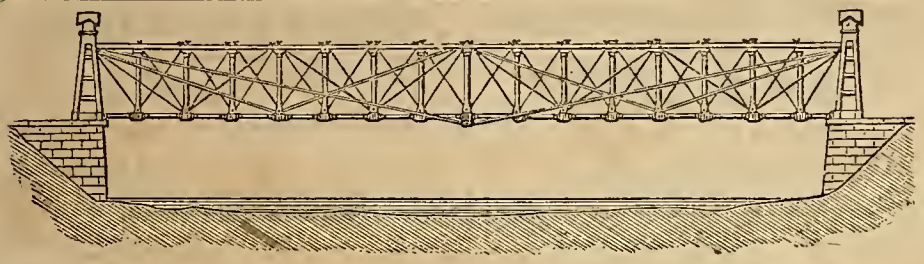
Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

# NEW-YORK AND HARLEM RAILROAD

Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 640*



*(Plan of Elys.)*

## FINK'S PATENT
## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box,* 1392.

---

**HOLENSHADE, MORRIS & CO.**

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

**SCREW BOLTS,**

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

**M. W. BALDWIN & CO.**

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

**LOCOMOTIVE ENGINES,**

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring). Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

**KNOX & SHAIN,**

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

**FINDINGS,**

AND

**MACHINERY,**

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES JOEL C. LANE.

---

**BUSH & LOBDELL,**

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

WILMINGTON, DELAWARE,

MANUFACTURE

**Chilled Wheels and Tyres**

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

**AMERICAN BANK NOTE COMPANY.**

***Bank Note Engravers & Printers.***

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constant'y on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

**SUPPLIES,**

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

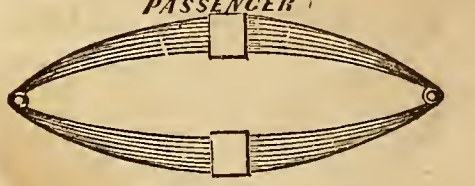
RAILWAY SPRINGS.

**FREIGHT**

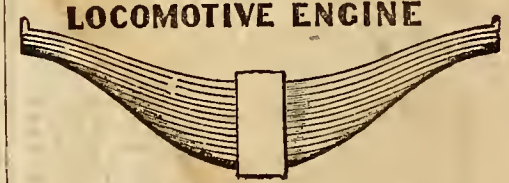




**PASSENGER**



**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

**SPRINGS.**

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y.

Shops—Seventeenth and Coates St. PHIL.

---

**Railroad Iron.**

The undersigned, agents of the manufacturers are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Steel Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,
54 Exchange Place, New York.

---

**W. M. F. HEWSON,**

**STOCK BROKER,**

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes Gold

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg*.

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH, *Master Transportation, Baltimore*
J. H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L. M. COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sleeping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P M. |
| Indianapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots, East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

SUNDAY, JUNE 19, 1865.

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth Street, adjoining the Gazette Office; No. 12 Broadway, Railroad Hotel Building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E. FOLLET, General Tick Agent.

W. D. GALSWOLD, General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President
W. H. L. NOBLE,
Geoeral Ticket Agent.

C. R. COTTON, Cincinnati Agent.

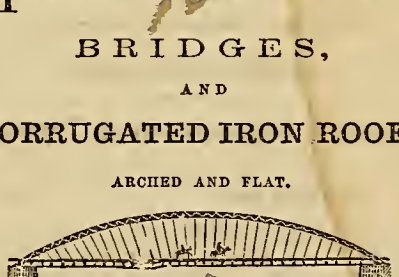
## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

McDANEL & HORNER,



*Locomotive and Railroad*

CAR SPRING MANUFACTURER,

Wilmington, Delaware.

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works

June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

LOCOMOTIVE ENGINES

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅜ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1½ to 24 inches in diameter, and branches for same, &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, THOS. T. TASKER, JR., HY. G. MORRIS.
CHAS. WHEELER, S. P. M. TASKER

## Philadelphia, Wilm'gton & Baltimore RAILROAD!!

## FOUR PASSENGER TRAINS DAILY

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY

4.30 (Express Monday excepted), 8.05 A. M.; 12. A. M (Express); 2.30 P. M.; 11.30 P. M night.

On Sundays, 4.30 A. M; 11.30 P. M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express

On Sundays, 10.24 P. M.

☞Through connections made for all points East and West.

# The Railroad Record.

E. D MANSFIELD,
T. WRIGHTSON, - - } Editors

CINCINNATI:
THURSDAY, FEBRUARY 22, 1866.

## THE RAILROAD RECORD,

*PUBLISHED EVERY THURSDAY MORNING,*

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.

| | |
|---|---|
| One square, single insertion | $ 1 00 |
| " " per month | 3 00 |
| " " six months | 12 00 |
| " " per annum | 20 00 |
| " column, single insertion | 5 00 |
| " " per month | 10 00 |
| " " six months | 40 00 |
| " " per annum | 80 00 |
| " page, single insertion | 15 00 |
| " " per month | 25 00 |
| " " six months | 110 00 |
| " " per annum | 200 00 |

Cards not exceeding four lines, $5,00 per annum

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Address business and other communications to

WRIGHTSON & CO.,

*Proprietors.*


## Arrival and Departure of Trains.

LITTLE MIAMI.

| | *Depart.* | *Arrive.* |
|---|---|---|
| Cincinnati Express | 1:00 A. M. | 6:30 P. M. |
| Mail and Accommodation | 9:00 A. M. | 5:20 A. M. |
| Columbus Accommodation | 4:00 P. M. | 4:00 A. M. |
| Morrow Accommodation | 5:30 P M. | 8:00 A. M. |
| Night Express | 7:00 P. M. | 3:50 P M |
| Night Express | 10:00 P M. | 9:40 A. M. |

MARIETTA AND CINCINNATI,

| | | |
|---|---|---|
| Mail | 5:00 A. M. | 7:30 P. M. |
| Hillsboro Accommodation | 3:25 P. M. | 11:00 A. M. |
| Night Express | 9:30 P. M | 5:45 A. M. |

CINCINNATI, HAMILTON AND DAYTON.

| | | |
|---|---|---|
| Indianapolis & Cambridge City | 7:00 A M. | 9:50 P. M. |
| Toledo and Detroit | 7:00 A. M. | 9:50 P. M |
| Dayton and Sandusky | 7:00 A. M. | 5:50 P M. |
| Richmond and Chicago | 7:00 A. M. | 9:50 P M |
| Dayton Accommodation | 6:45 P. M. | 9:35 P M. |
| Dayton, Indianapolis and Cambridge City | 2:30 P. M. | 12:55 P. M. |
| Toledo, Detroit and Bellefontaine | 5:00 P. M. | 12:55 P. M. |
| Hamilton Accommodation | | 8:15 A M. |
| Richmond & Chicago | 5:30 P. M. | 1:10 P. M. |

CHICAGO & GREAT EASTERN.

| | | |
|---|---|---|
| Richmond and Chicago | 7:00 A. M. | 9:50 P. M. |
| " " | 5:30 P. M. | 1:20 P M |

INDIANAPOLIS AND CINCINNATI.

| | | |
|---|---|---|
| Chicago and St. Louis Express | 7:30 A. M. | 10:30 A M. |
| Mail & Springfield Express | 2:00 P. M. | 4:30 P. M. |
| St Louis and Chicago Express | 7:30 P. M. | 1:10 A. M |
| Lawrenceburg and Harrison Accommodation | 4:30 P. M. | 8.30 A. M. |
| Harrison Accommodation | 10:15 A M. | 2:20 P. M. |

CINCINNATI AND INDIANAPOLIS JUNCTION R. R

| | | |
|---|---|---|
| Connersville, Cambridge City and Indianapolis Mail | 7:00 A. M. | 9:50 P. M. |
| Connersville, Cambridge City and Indianapolis Express | 2:30 P. M. | 12:55 P. M. |

CINCINNATI AND ZANESVILLE.

| | | |
|---|---|---|
| Mail | 9:00 A. M | 4:35 P. M |
| Caboose Accommodation | 4:00 P. M. | 8:00 A. M. |

KENTUCKY CENTRAL.

| | | |
|---|---|---|
| Express | 6:00 A. M. | 6:30 P M |
| Accommodation | 1:50 P. M. | 11:00 A M. |

ATLANTIC AND GREAT WESTERN RAILWAY.

| | | |
|---|---|---|
| Morning Express | 9:10 A. M. | 6:30 P. M |
| Night Express | 0:30 P. M. | :30 A M. |

### Railroad Progress and Improvement in Cincinnati.

The City Council, of Cincinnati, recently passed a resolution to send a Committee to the Legislature, and procure a law authorizing the City to subscribe a million of dollars to the Southern Railroad. But, before the Committee set out, the wise gentlemen of the City Council found the Constitution gave the Legislature no power to confer such authority! This clause is, of course, an absurdity—made to guard the people against themselves! But, it is thus, and the good people of Cincinnati must either put their own shoulders to the wheels, or go without the Southern Road. What will they do? We shall see. But, for our own part, after a good deal of experience in the way public affairs are managed, we do not expect to see Cincinnati take any important step in the matter; and thus, after a great deal of talk, things are likely to go on, as they have done, for the last thirty years.

In the meantime, however, the necessities of commerce, and of the railroads themselves, have compelled some improvements in railroad lines about the city, which are solid improvements and will greatly aid the commerce and the convenience of the city. We will give a brief notice of them:

1. The construction of the *Atlantic & Great Western* has resulted in making a near route to New York, which must in the end be a new and independent line. It now goes from Cincinnati to Salamanca (N. Y.,) on the Erie road; but, of the contracts recently made by this company, with the *Catawissa* and the *Reading* Companies, are completed there will be an entire new line from Cincinnati to Philadelphia. The *Pennsylvania Central* and its friends are endeavoring to defeat this arrangement, by litigation, but, we think unavailingly. There is a determination both in courts and people, to prevent all monopolies, if possible, and what would the Pennsylvania be but a joint monopoly—if it could prevent the making of other roads through Pennsylvania? We think, therefore, that the *Atlantic & Great Western* will open to Cincinnati a new route, both to New York and Pennsylvania.

2. The completion of the *Pan Handle Road* across the west of Western Virginia, and of the Bridge over the Ohio, at Steubenville, has opened another new route to Philadelphia and New York. This severs the circuitous bond by the Ohio Valley. At the present time the Steubenville route is the shortest and best between New York and Cincinnati. We have described this line heretofore, and have only to say, that no railroads, in the United States are better managed than those which make up the Pan Handle line, viz: *Little Miami*, the *Steubenville & Pittsburgh* and the *Penn. Central.*

3 The last and one of the greatest improvements, in the Cincinnati system of roads, is the completion of the Marietta road to its Western Depot. The Marietta road did not contemplate doing, originally, what they have since been compelled to do. If they had, the road would have been made to Milford, instead of Loveland on the Little Miami. The difference, however, is not very important, and the company have now completed an independent line, at least, all but four or five miles in the suburbs of Cincinnati, over which they pass on the *Cincinnati, Hamilton & Dayton Road.* This gives the Marietta Company, in connection with the Baltimore & Ohio (with whom they are intimately associated), a complete, well equipped, independent line from Baltimore to Cincinnati. It is emphatically the Baltimore line. Of the improvement of this road, in Cincinnati, the *Gazette* says:

The Baltimore and Washington City Night Express, from Parkersburg, W. Va., came in on the new road from Loveland, Saturday morning, arrived at the new passenger depot, corner of Pearl and Plum street, at 7:02, A. G. Ridlin, conductor, Perce Morse, engineer. All trains will hereafter run over this new line, which has been proved to be well finished and in good condition. The distance from Loveland down, by the C. H & D Road from the Junction above Spring Grove, is 26 miles, which will be reduced considerably when they complete their own track all the way through. The stations after leaving Loveland are, Symmes, Montgomery, Madeira, Madisonville, Walnut Hills, Avondale, Ludlow Grove, Spring Grove, Ludlow, Brighton, all the centers of rapidly growing suburban neighborhoods.

The Company have fifty-three locomotives, fifteen of these being ten wheelers and powerful freight engines. They have twenty five new passenger cars, two sleeping cars and five hundred and thirty one freight cars, all of which have recently been rebuilt, and will compare favorably with those of the best roads in the United States.

The connection of this road with the Indianapolis and St. Louis roads obviates the necessity of any omnibus or carriage driving at this point for passengers going West or South, as it does, also, the cartage of freight. The Company own two squares between Pearl and Columbia, and west of Central avenue, which are devoted to freight purposes. They have erected a building on Pearl, east of Smith, and are now erecting a similar building on Columbia, east of Smith, with a view of extending these buildings to Central avenue at as early a date as practicable. They have also purchased two hundred and fifty thousand dollars worth of property near Park street, on which it is intended to construct their round house, machine shops, car houses, &c.

With these improvements and an independent line, no road entering Cincinnati is likely to do a larger or more profitable business than that of the Marietta Company. Our views on the subject have frequently been expressed, they are briefly these:

1. The line of railroad made by the *Baltimore & Ohio* and the *Marietta* is the *shortest line between Cincinnati and tide water.* The actual line run will be as follows:

| | |
|---|---|
| Baltimore to Grafton | 279 |
| Grafton to Parkersburg | 104 |
| Parkersburg to Cincinnati | 203 |
| Aggregate, miles | 586 |

Cincinnati to Philadelphia..... 665 miles.

The route to New York is much longer. No line can be made, by rail, to any of the Northern Atlantic cities, which is not 80 miles longer than that by Baltimore. A route may be made to Charleston and Norfolk nearer than that by Baltimore, but, we are in dispair that Cincinnati will never put forth a particle of real energy or commercial sagacity in that direction. It is true, now, and probably will continue to be, that the route by Baltimore is the best and shortest line to the Atlantic Seaboard. This is a great advantage.

2. A second advantage of the Marietta road is that it is on the *Southern flank* of all the railroads through Ohio. All the business South of the Wilmington & Zanesville line (and that comprehends one third of Ohio,) must be done either by the Marietta line or the Ohio river. In all the season of low water, and that is a time of active business, the Marietta road will have almost a monopoly of a very large transportation business.

3. The new depot of the Marietta road is in the very heart of the city, and will be more accessible and convenient than that of any company in Cincinnati. For these reasons, we think the future of the Marietta road will surpass all expectations. Heretofore it has been imperfect, and the war, for the time being, destroyed half the business of the Baltimore & Ohio road. If Cincinnati does not make the Southern road, she will at heart have the advantage of these improvements.

### News from Arizona.

We publish, in full, the report of Maj. Gorman, relative to the capture and destruction of the *rancheria* of the band of Apaches over which Old Cochise has so long been chief. It is well known that this is the band that, by design, way laid and murdered our Brother, W. Wrightson, and his companion Mr. Hopkins, on Feb. 17th, 1865. The pistols of W. W. have been seen in his possession, as well as other articles, and although it can in no wise lessen our loss, yet it is gratifying to learn that justice is overtaking them. "Francisco, the butcher," who was shot dead while attempting to escape from the guard (which, by-the-way, is in this out-of-the-way Territory, the most approved, though not a new method, of avoiding troublesome and tedious courts martial) was the *Lieutenant* of Cochise, and was in Tuscon some few days before the murder, disguised as a *Greaser*, where, by the aid of Mexican women, or other means, he learned of the intended visit to Fort Buchanan, when he immediately repaired to the *rancheria*, and laid his plans for their murder before Cochise, who furnished him the necessary men for carrying out the diabolical plot. "Lo! the poor Indian," is very pretty sentimentalism, but when applied to organized robbers and cut-throats, who possess no attributes whatever, except those held in common with the wolf, it becomes degenerate and is a waste of sympathy.

### Report of an Indian Fight.

Head Quarters, Fort Bowie,
November 9th, 1865.

Captain:—I have the honor to report, for the information of the General commanding, the result of a scout made by me in the Chiricahui mountains, Arizona Territory, to the south of this post. I started on the first instant, at 1 o'clock, P. M, with Lieutenant Norton and thirty men of Co. L, First Cal. Cav., also three men of Co. A, First New Mexican Infantry. I pursued a south-westerly course along the base of the Chiricahui range of mountains, up to what is known as the Lumber Camp, a distance of 18 miles from this post. I halted at this point and sent my guide, Marijildo, with scouts, to explore the neighboring mountains,—he returned about day break next morning, and reported that he had not discovered any Indian signs in the vicinity. During the following day I secreted myself and command in a secluded place, and resumed my march at nightfall in a more westerly course, and arrived at a spring, about 3 o'clock, A. M., which I named Mescal Spring, from the abundance of that plant growing there; distance travelled, about 16 miles. At dark, on the evening of the 3d, I started for El Potrero, and arrived there about 4 A. M, on the 4th. During this night's march we passed by the canons known as Fresno and Fierro Blanco, and carefully examined them, as well as the entire route, but discovered no traces of Indians. At this place we found the first strawberry vines I have ever seen in this Territory. I remained here the entire day, keeping as secluded as possible. The range of mountains at this point is called, by the Indians, the White Stone range, owing, I suppose, to the immense quantity of quartz found in them. Gold was found here by the men of the command in such a quantity as to denote very rich deposits. The men being all old California miners—seeing gold indications—washed some of the gravel in the palms of their hands, and found what a California miner would call a "good prospect." Gold bearing quartz exists in these mountains, and no doubt rich and extensive placer mines will some day be discovered in that locality. An abundance of wood, water and grass is found here; wild turkeys and deer were by no means frightened at our presence, of which a great many of each were seen We were very much tempted to indulge in a shot, but greater game we were hunting might be lurking in the vicinity and by the report started up frustrate the end in view, consequently turkeys and deer were suffered to go unmolested, much to our regret, for such dainties are always very palatable, more particularly on scout. During the day, the guide discovered fresh tracks of three Indians, about 4 miles distant from our camp. Distance travelled from last camp, 21 miles. At dark we saddled up and travelled until about 2 o'clock, A. M., the guide following the tracks of the three Indians over a hard and rocky ground with a sagacity truly wonderful. I halted here and sent the guide to reconnoitre the ground. He returned in about one hour with the glad tidings that he had found the rancheria, about 3 miles distant. This intelligence was indeed gratifying, and preparations were immediately made to attack it at the "peep o' day." I picketed my horses in a deep ravine close by, leaving with them a guard of 8 men, and with the rest of the command I started, on foot, across the mountain, for the rancheria. We crept along cautiously over rocks and through bushes, until within about a quarter of a mile of the rancheria; daylight was just breaking as we caught a glimpse of it. The Indians had placed a sentinel on the mountains to our left, but we had already passed him when he discovered us and gave the alarm. Being discovered, no alternative was left but to "run for it." I gave the word forward, and a finer and more closely contested quarter race has seldom been seen, every man striving his best to be the first in "at the death." The Indians broke up the mountains like deer, scattering in all directions. We opened fire on them as they ran, and were soon in complete possession of the rancheria. About this time I discovered another rancheria about half a mile up the canon. Leaving Lieutenant Norton to complete the work so well begun, I started for it with a part of the command, but the birds had flown, leaving every thing behind them. We succeeded in getting in many excellent shots at them, as they were running up the side of the mountain. Seven Indians are known to have been killed, besides a greater number wounded—some, no doubt fatally. We captured five horses, one cow and calf—one horse being too badly wounded to travel, I was compelled to kill him. The following articles were also captured, to-wit: Nine saddles, nine bridles, two government halters, one cartridge box, with the name of private Ring, Co. L First Cal. Cav., C. V., written inside, one frying-pan and a lot of carbine caps. The last four articles enumerated were taken at the time the vidette station of old Fort Buchanan was captured by the Indians in February last, the articles being recognized by the men stationed their at the time. We also captured about ten pounds of lead, a small quantity of powder, four hatchets, one lance, one sack of bullets, a lot of needles, silk thread, thimbles, scissors, combs, several packages of water colors, and various other small articles, supposed to have been taken from the German murdered at the Cienega in July last. There were fourteen lodges in all, evidently prepared for winter quarters, being covered with hides. There were about forty well dressed hides of different animals used for bedding. We burned them all, together with a large quantity of mescal, dried meat, sacks of seeds, baskets, Indian saddle-bags, all their cooking utensils,—in fact, every thing they had,—and seven saddles, which could not be transported. One of the two saddles brought into the post is supposed to be the property of Mr. Wrightson, who was murdered near Fort Buchanan in February last. The number of Indians were estimated to be between 50 and 60, and are known to be Cochise's band. My guide, Marijildo, who was a captive among them for several years, informs me that Cochise and his band boast that they have never been surprised by the whites, and the fact that they had a sentinel posted some distance from their rancheria, augurs well for the great vigilance they are said to exercise at all times. There is no doubt that Cochise and his band have committed more depredations than any other equal number of Indians in this part of the Territory. We destroyed his winter stores of provisions, hides for shelter and raiment, which doubtless leaves him in straightened circumstances, at least for the present. No men could possibly have behaved better, and where all done so well, to discriminate would do injustice to the rest. I had one man slightly wounded in the hand by an arrow. I attacked the rancheria on the morning of the 5th, and left, after having completely destroyed it, at about eleven o'clock, A. M, and travelled some 4 miles, where I encamped for the night. I started on the morning of the

6th, on my return to the post, when I had a much better opportunity of observing the country over which I had been necessarily compelled to travel in the night. From Mescal Springs, south, strips of sycamore and live-oak timber, of large growth, occur every 5 or 6 miles, extending nearly across Sulphur Spring valley, at a place which I named Mud Springs, which we had passed on our outward trip, in the night. I discovered the remains of an old fort, situated on an elevation of some 20 feet above the plains, and distant about 250 yards from the springs. It is about 100 yards square, with bastions at the angles, and was, probably, erected by the early Spanish settlers. I remained here the night of the 6th, and left at an early hour on the following morning, and arrived at the post about 1 o'clock, P. M.

Very respectfully, your obedient servant,
JAMES GORMAN,
Major 1st Cal. Cav., Commanding Post.

### Wrightson and Hopkins.

The allusion in Major Gorman's report in *Miner* of to-day to the finding of a saddle supposed to have belonged to William Wrightson, who, with Hon. Gilbert W. Hopkins, was killed by the Apaches at old Fort Buchanan in the spring, reminds us that we have not done justice to the memory of those two worthy pioneers and devoted friends of Arizona.

William Wrightson, of Cincinnati, Ohio, was one of the first Americans who took a practical interest in our mines. He was intimately associated with Colonel Poston in the Cerro Colorado and Santa Rita Mining Companies, and had a familiar knowledge of the whole country below the Gila. He was Secretary of the Sonora Exploring and Mining Company, and through his paper, the Railroad Record, of Cincinnati, he had done much to bring the Territory into notice in the States. He worked eagerly and patiently for the organization of civil government here, and it was chiefly through his efforts that Hon. John A. Gurley accepted the first Governorship.

Mr. Hopkins, who was a native of New York City, came here a number of years ago, and became interested in mining, near the Sonora line. He was a chief owner in the Empire or Excelsior mine. After a sojourn of several years in the east, he returned to Arizona early in 1864, having made the trip over land via Santa Fe when the weather was excessively cold. He came out as Superintendent of the Maricopa Copper Mining Company, and expected to work their mines up on the Gila, or near the Gila, and some fifty miles east of the Pima Villages. In this he was delayed by the presence of hostile Indians, and went to Tubac to live with his old friend, Mr. Wrightson. From Tubac he was chosen a member of the first Legislative Assembly, and his position in that body was one of prominence and influence. Well educated, widely travelled, a practical miner, and versed in the science of mining, having made it a study in Europe, of an active and disciplined mind, he was a man of more than ordinary capacity, and a shrewd and intelligent legislator. He was chosen a regent of the University of Arizona from the first Judicial District, and he took an active part in the formation of the Arizona Historical Society, of which he was Vice President for Pima county.

The loss of such men as Wrightson and Hopkins is felt, and must long be felt throughout the Territory, and their names are deserving of high rank among those who have fallen in the attempt to promote our best interests.—*Arizona Miner.*

### Death of an Apache Chief.

Col. Robert Pollock, commanding at Fort Goodwin, informs General Mason, under date of November 11th, of the killing of an Apache Chief of the White mountain tribe, known as "Francisco the butcher," and who has been notorious for many years in the robberies and murders committed by his tribe. Francisco was arrested by Capt. Kenedy for complicity in the massacre of a German family, and others from Texas, on the Cienega, twenty-eight miles from Tucson, on the Apache Pass road, a short time since, as well as to induce the tribe to give up three children captured at the same massacre, and who are yet in the Indian's hands. Col. Pollock says: "On the night of the 10th inst., about 10 o'clock, the prisoner applied to the acting Sergeant of the guard, Wm. C. Pascoe, Corporal of Co. I, 1st Cav. C. V., for permission to go to the rear, which was granted, and he was accompanied by a Corporal and two men. On arriving at a point about ninety yards from the guard house, the prisoner (who was a large and splendidly proportioned man) started and sprang off, when the guard fired several shots at him, nearly all of which took effect, and he fell, dying instantly, shot through the brain, heart and abdomen. I found that the rivets of the shackle on the left leg and band had been filed off and taken out, completely liberating the prisoner. Francisco's death has made little or no impression on the Indians in the vicinity, they visit the post daily, and appear to be satisfied that death is the inevitable result of attempts to escape from the guard house, besides, the deceased was much feared among them, and it seems that many breathe easier, now that they have no more to fear from him."—*Arizona Miner.*

### Survey of the Southern Central Railroad.

Extract of report of Frederick E Knight, Chief Engineer, dated Auburn, January 4, 1866:

GENTLEMEN:—I have the honor to submit for your consideration the following report and estimate of a preliminary survey, made to ascertain the character and cost of a railway extending from Fair Haven, on Lake Ontario, to Owego on the New York and Erie Railroad; and also briefly to exhibit the connections and business which may be fairly anticipated from its construction.

This will be most clearly accomplished by dividing the subject under the several heads of Description of Route, Alignment and Grades, Cost of Road and Equipment, and Connections and Earnings.

DESCRIPTION OF THE ROUTE.—The harbor of Fair Haven, on the south shore of Lake Ontario (the northern terminus of your road), has great facilities for the economical construction of docks and warehouses, for transacting a large coal and freight business; is situated about fourteen miles southwesterly from Oswego, and possesses depth and capacity sufficient to shelter the commerce of the Lakes; it is 2¼ miles in length, three-fourths of a mile wide, and 25 to 40 feet deep.

With easy access in case of storms, it has excellent anchorage, protected by a bold shore and adjacent high lands.

It labors under a temporary difficulty at the entrance from drifting sand and gravel, which was partially relieved several years ago by an appropriation from Congress of $10,000; this sum was well expended in the construction of piers and dredging, but the channel requires further deepening to admit vessels of large size; for this, Government will doubtless grant an appropriation during the present session of Congress.

Commencing then at the harbor of Fair Haven, the line follows the location of Ontario, Auburn and New York Railroad, passing through the towns of Sterling, Victory, Ira, Cato, Brutus and Sennett to the city of Auburn, a distance of 31¾ miles. The villages of Martville, Cato and Weedsport occur on this portion of the route; and the Seneca river, New York Central Direct Railroad, and Erie Canal, are severally crossed over near the village of Weedsport.

Passing through the city of Auburn, the line proceeds along the outlet and east bank of the Owasco lake, continuing up the valley to Dryden summit, whence it gradually descends along the valley of Owego creek to Owego, terminating at the depot of the New York and Erie Railroad, a distance of 66¾ miles; or a total distance from Lake Ontario to Owego of 98½ miles.

This portion of the route traverses a fine natural valley—passing through the towns of Owasco, Niles, Morovia, Locke, Groton, Dryden, Harford, Richford, Berkshire, Newark Valley and Flemingville; and the villages of Moravia, Milan, Groton, Dryden, Harford, Richford, Berkshire, Newark Valley and Flemingville.

The soil is generally of a dry, gravelly formation, without rock, excepting along the shore of Owasco lake, and is throughout of a character to form an excellent road bed, with abundance of good timber, suitable for ties or structures of any kind.

The entire length of the line passes through a fine agricultural country, at present unprovided with railroad accommodation, comparing favorably in wealth and population with any portion of the State, resting under similar disadvantages.

Four counties are traversed between Lake Ontario and Owego, the distance through each being as follows, viz:

| | | | |
|---|---|---|---|
| Cayuga, | 56.55 miles. | Cortland, | 2.83 miles. |
| Tompkins, | 15.80 " | Tioga, | 23.22 " |
| Total, | | | 98 40 miles. |

ALIGNMENTS AND GRADES.—An important principle in the projection of railroads, is to procure such directness, alignment and grades as shall avoid the liability of being subsequently superseded by a superior location This is amply secured by the natural formation of country through which your road passes, and the equal distribution of the elevations to be overcome, in either direction of the traffic, whereby the capacity of the line will be largely increased over competing roads, which could not avail themselves of such favorable circumstances, and whose expenses of operating are much increased in consequence thereof.

As your road, except from Lake Ontario to Auburn, has not been finally located, it will be sufficient to say that at least two thirds of the entire distance will be composed of straight lines, and one third of curvature generally of six thousand feet radius, except in the city of Auburn or Owego.

GRADES.—The ascent to be overcome between Lake Ontario and Auburn is 424 feet, or an average grade of 13 35-100 feet per mile for 31¾ miles.

From Auburn to Moravia the ascent is 51

feet, or an average grade of 3 feet per mile, for 17¾ miles.

From Moravia to the Dryden summit the ascent is 493 feet, or an average grade of 22 37-100 feet per mile for 22 3-100 miles.

From Dryden summit to Owego the descent is 398 feet, or an average grade of 14 81-100 feet per mile, for 26 87 100 miles.

It is well to remark here that the latter descent is the only one opposed to the coal traffic coming north, the maximum grade on which will not exceed 18 feet per mile, and that for short planes only.

Compared with existing roads, these data give very favorable results, such as (with the proper connection) cannot be equalled for a rapid and economical transportation of passengers or freight.

ESTIMATED COST OF ROAD AND EQUIPMENT.—This is based upon the following description of work, viz: a roadway for single track, 20 feet wide in excavation, and 15 feet wide on embankments, with the additional widths for sidings where necessary.

The culverts, cattle guards and cattle passes to be of dry rubble masonry.

The bridges over the Seneca river, New York Central Direct Railroad and the Erie Canal, of the best quality of mechanical work in bridging and masonry.

The crossing over the Owego and other creeks to be of piles well driven, capped with oak, with bolsters and continuous track stringers, the whole to be bolted and strapped with wrought iron in the best and strongest manner.

A superstructure, adapted in all respects to a first class road, with a rail not weighing less than 56 pounds per lineal yard.

Total cost of road,.....$2,407,642
Total cost of equipment,..... 585,000

Making the total estimated cost of road and equipment $2.992,642, or an average cost of $30,413 per mile.

It will be seen from the above estimate that no provision is made for right of way and land damages; this arises from the fact that about three-fourths of the whole distance is already donated to the company to aid the construction of the road, showing the substantial favor with which the project is received along its entire length

The qualities of work are based upon actual surveys, and it is believed the estimates and prices are amply sufficient to build the road.

The items of equipment, depot buildings, machine shops, etc., may be increased or modified, as the wants of the company are developed; the former by extension of docking and freight accommodations at the lake, the latter by constructing works of a more temporary character than those herein contemplated.

CONNECTIONS AND ANTICIPATED EARNINGS — Having arrived at the cost of this undertaking, it now remains to show that the connections and geographical position of the road are such as will make it remunerative to the stockholders; for although a local desire for railroad accommodation may alone impel many to invest their capital in its construction, experience shows that the result is by no means satisfactory, or attended with such general benefit, as works of a public character should make it their aim to secure.

An impression has been abroad that what are called lateral roads are of secondary importance, and therefore often unremunerative; but it will be seen that the Southern Central forms an important link in a system of railroads extending over 2,000 miles, *and is as much a through route as the New York Central or Erie;* and whilst the freight business on these roads is, in one direction, 7-10ths, and in the other 3 10ths of the whole amount; the lake trade from the north, and coal trade from the south, keeps up a steady stream each way.

The first connection made from the lake is with the New York Central Direct Road and the Erie Canal, at Weedsport, a distance of 22 miles; at this latter point there is already secured depot accommodation for stocking and transhipping coal east or west.

At Auburn, a distance of 32 miles from the lake, the Auburn division of the New York Central is intersected

At Owego, a distance of 98 and 4-10ths miles, connections are made with the New York and Erie, and the Delaware, Lackawanna and Western Railroads, securing an excellent route for travel to New York and Philadelphia.

Here, also, the anthracite coal of the Scranton Company is reached, at a distance of 84 miles from the mines.

However good the connections above described may appear, they do not secure such an amount of return traffic as would place the road at once in a favorable light to capitalists; and were this the extent of business anticipated, but small returns on the investment could be prudently estimated.

But at Towanda, only 30 miles south of Owego, and extending thence at intervals for 80 miles further, until Pittson and Wilkesbarre are reached, lie vast mines of bituminous, semi-bituminous, and anthracite coal, comparatively untouched, but now anxiously awaiting an outlet to market, by the shortest and easiest route existing on this continent.

From Owego, the valley of the Susquehanna runs through this magnificent region of mineral wealth, inexhaustible in quantity and unsurpassed in quality. From this, most northerly of all the coal formations, must be drawn our future supply of fuel for railroads, steamboats, manufactories and domestic purposes.

From Pittston and Wilkesbarre to Owego, a distance of about 105 miles, the present channel for freight is the North Branch Canal, extending north to the Pennsylvania State line, and thence by the Chenango Canal Extension; but the great coal and railroad interests of that State are already alive to the importance of *pushing forward their lines up the Susquehanna valley*, whereby a continuous route will be secured, not only to the anthracite coal of Pittston and Wilkesbarre, but from Lake Ontario to Philadelphia and Baltimore.

## Henderson (Ky.) & Nashville Railroad.

The Board of Trade of Evansville are agitating the feasibility of finishing the Railroad from Henderson through Madisonville, and Tompkinsville, and connecting with the Louisville & Nashville R. R., near Tait's Station. Mr. Daniel Head, a merchant of Evansville, a Kentuckian of capital and business experience, has introduced resolutions before the Board, looking to an early completion of this important thoroughfare.

We understand that nearly all the grading from Henderson to Hopkinsville is finished, and that five miles adjacent to the former city the track is nearly laid, ready for the iron horse. The country through which this road passes abounds with mineral resources and agricultural products, which will be developed to the full on the completion of the road.

## Concord Railroad Frauds,

A Concord, New Hampshire correspondent of the Boston Journal, writing on the 12th inst., says:

The alleged defalcations upon the Concord Railroad are far and near the general theme of conversation and interest. The investigations of to-day have disclosed many circumstances tending to throw light upon the affair. Mr. Whitcher of Hooksett states that for a long time he has been in the habit of supplying conductors upon the Concord line, and to some extent upon other routes, with pails, tubs, brooms, firkins, and other articles of that character in considerable quantities, and that his pay was invariably in railroad tickets. Sometimes he would receive two or three tickets, and then again as high a number as twenty or even thirty. He was accustomed to sell them to any parties where he thought they could be safely used. It is stated that Mr. Whitcher sold two hundred dollars' worth of tickets to one dry goods firm in Manchester and fifty dollars' worth to another firm in the same place, taking various articles from the store in payment. Parties in Boston and Concord are also reported to have received numerous tickets from the same source. It is supposed that Mr. Whitcher is only one of many agents who have been engaged in this ticket selling business.

Transactions like the above are only slight offenses compared with the alleged withholding of fares paid in the cars. Major Carney's method of detection was to transport soldiers over the railroad ostensibly for claim agency purposes, paying their fares in money, and afterward examining the waybills of the conductors to see the amount of money returned to the ticket office at the close of the trip. Only a few experiments were required to show that most of the money paid for faers went in the wrong direction. The examination of the waybills of the conductors for several years past showed at once the state of the affairs. One conductor returned for the first year of his some three thousand dollars; for the past year, with circumstances equally as favorable, less than one thousand. Another conductor, running some twenty-five miles, and ticketing still further, returned for several weeks an average of fifty cents a train; at another time an average of seventy cents a train. Still another conductor run about thirty five miles and ticketed about that distance beyond his route, yet he returned on an average only about three dollars and a half for a train. The comparison of conductors' waybills for different seasons of the year, and upon various branches of the line where the travel was always in different proportions, developed some interesting facts. Light trains under one conductor would sometimes net double the proceeds of heavy trains under other conductors. The amount of money returned by conductors after they discovered the detective system is reported to have been three times as large as the sums found upon their waybills when all was "quiet on the line."

Five of the discharged conductors have had attachments placed upon all their property which can be found. The attachments in Concord are for $100,000, $50,000 and $15,000; one in Manchester for $100,000, and one in Portsmouth for $20,000. The tickets illicitly sold by the conductors are said to be the same as purchased at the regular offices, but that they were taken up *unpunched*. It is now thought that the disclosures yet to be made in the matter will be more astonishing than anything which was yet come to light.

### Letter from Mr. M'Henry.

THE A. & G. W. RAILWAY OFFICES,
No. 5 WESTMINSTER CHAMBERS, VIC'A ST.
WESTMINISTER, S. W., LONDON, Jan. 3 '66.

DEAR MR. DOUGHERTY: I see that the opponents of the Atlantic & Great Western are endeavoring to make a diversion in favor of the Pennsylvania Central by the old cry of "British capital," which, I fancy, has been long since played out.

Sir Morton Peto was in the United States, with other friends, as my guest, and is in no manner responsible for my movements, social or financial. On the contrary, I am responsible for all of his.

I intend to make the influence and operations of the Atlantic & Great Western Railway Company reach into Philadelphia and into Pittsburg, connecting these cities by an unbroken communication with Chicago, Cleveland, Buffalo, St. Louis and Cincinnati, and am fully prepared to meet any opposition fairly conducted.

My views of the future of railways and their management are very different from most of the railway people in America.

I know there is traffic for double or treble the existing mileage I know my lines will be very prosperous, and I am sure that the Pennsylvania Central and Philadelphia & Erie will, at the same time, be more prosperous than ever. Business begets business, and even now the dormant traffic of the Great West is ten fold more active.

Give the Western States a sure, a speedy and cheap transit at all seasons for their produce, and the present prosperity of the whole country will be paled by the future.

For nearly fifty years my family have been not obscure residents of Pittsburg and Philadelpha, and I have now investments in Pennsylvania exceeding those of any other single proprietor.

I will yield, therefore, to no man in pride of the State, and am determined to make my position useful to it, and honorable and profitable to myself. I have been the means of spending thirty or forty millions of foreign capital in and about Pennsylvania without doing Pennsylvania any harm, and I claim the privilege of spending as much more to open up the western and central counties as a part of a system of railway communication which, in extent, construction and management of its traffic in goods and passengers, shall be uncqualled in the world.

Vast interests, with their usual selfishness, may not wish to be disturbed, but they will find in the long run that they are more frightened than hurt; that they must yield in any event to the greater interests of the whole State, that Pennsylvania does not belong to any corporation, and that I shall succeed in my plans.

I am, dear Mr. Dougherty, most faithfully yours, JAMES MCHENRY.

Daniel Dougherty, Esq , Phil.

### Railroad Bridge at Albany Completed.

Albany, February 15.

A locomotive passed over the Hudson River bridge for the first time to-day. It was the engine Augustus Schell, of the Hudson River Railroad. The first train over it is designed to start on next Tuesday, the 20th inst. The Railroad Company intend celebrating the occasion, and for this purpose have invited nearly all the prominent railroad men, East and West, to be present.

### White Mountains Railroad.

Several railroad projects are now under consideration in New Hampshire; among them is: the building of a line from Manchester to Keene, and one from Suncook to Pittsfield; also the extension of the Contoocook River Railroad from Hillsboro' to the southwestern part of the State, the Concord and Claremont from Bradford to the Connecticut River, and the White Mountains road to Lancaster, and in time, to the Grand Trunk line. The extension of the White Mountains road is regarded as a matter of great importance. There is considerable encouragement given that this extension may possibly be pushed forward to Lancaster the present season. Three routes are proposed, with Littleton as a starting point. The first is *via* Dalton, distance 20 miles; the second, *via* Jefferson, distance 22 miles; and the third, *via* Bethlehem Hollow, distance 27 miles. Still another route is mentioned, where the idea is entertained of leaving the White Mountains road at North Lisbon, five miles below Littleton, thence up the valley of the Gale River, which is the south branch of the Androscoggin, to a point distant three miles from the Proule House, and six from the Fabyan Stand; thence through the towns of Carroll and Whitefield to the "Jefferson Meadows," and from there forward to Lancaster, the whole distance being about thirty miles.

### The Mississippi and Missouri Railroad.

We have procured a copy of the following sworn statement furnished by the officers of the Mississippi and Missouri Railroad to the Treasurer of State, as required by law, and to this we invite the careful attention of our readers:

From this statement, and that of the previous, we make the following comparisons:

| | |
|---|---|
| Gross earnings of 1864 | $603,209 32 |
| Operating expenses of 1864 | 333,373 12 |
| Nett earnings | $269,836 20 |
| Gross earnings of 1865 | $730,113 68 |
| Operating expenses of 1865 | 464,284 25 |
| Nett earnings of 1865 | $265,829 43 |
| Operating expenses 1865 | $464,284 25 |
| Operating expenses of 1864 | 333,373 12 |
| Increased cost of operating 1865. | $130,911 13 |

Thus it will be seen that while the increase of the gross earnings of 1865 over 1864 was $126,904 36, there was an actual decrease in the net earnings for the year 1865 of $4,006-77

The increase of expenditures was largely due to the advance in the cost of fuel and other material, and in the compensation of employees. No part of the cost of repairs to the road is included in this expense account, all such expenditures being charged to the construction account.

It will be seen that the net earnings of 1865 would pay an interest of but *seven* per cent. on a capital of only $3,797 563 28, whereas the Mississippi and Missouri Railroad has cost fully ten millions of dollars. A large proportion, however, of this heavy cost was due to the peculiar circumstances under which the road was built, and much of it has been permanently *sunk* in the pockets, or rather out of the pockets, of the original shareholders. The actual cash value of the road may now be estimated at five and a half millions; a low valuation, it is true, but that at which the negotiations now in progress for the sale of the road are based by all parties concerned. In order to pay those whose money is thus invested, interest thereon at the rate of seven per cent., the net earnings should have been $385,000 00 or $119,170 57 more than they actually were. In other words, the actual interest earned was but a fraction over *four and three-fourths* per cent.

We confess to much surprise at these figures, having supposed the "erroneous profits of the railroads" to be something more than a mere figure of speech. The *figures* we have given, however, are entirely correct, and are well worth the consideration of "all whom it may concern."

### New Eastern Outlets for the Pittsburg, Ft. Wayne & Chicago Railway.

The Penn. Central Railway Co., by the sale of $1,600,000 of stock held by them, to the Pitts & Ft. Wayne Co , no longer own a controlling interest in that road, while the adoption of the Steubenville route as their principal thoroughfare westward has brought home to the Pitts. & Ft. Wayne the necessity of looking for independent outlets for their traffic to eastern cities. We believe that arrangements are already being negotiated with the Atlantic & Great Western route for a close connection with their road at Mansfield to New York and Boston, and still later an offer of $3,000,000 has been made by a prominent capitalist in behalf of the Pitts. & Ft. Wayne road to extend the Pitts. & Connellsville road to Cumberland, there to connect with the Baltimore & Ohio, thus constituting a new and independent route from Chicago to Baltimore — and also to Washington, as soon as the proposed line from that city to Point of Rocks is completed.

The Pennsylvania papers generlly, lament the transaction which has lost to the Penn. Central, the control of the Pitts. & Ft. Wayne line, although temporarily it may have been to their pecuniary advantage. The Pitts. & Ft. Wayne in conjunction with the Penn. Central is no longer virtually a continuous line extending over a vast extent of territory, and tributary to Philadelphia interests. A large share of its northwestern traffic will no doubt pass over the Penn. Central as hertofore, but much of it also will be diverted to new markets over new consolidated lines, through such railway combinations as may be hereafter perfected, as may best subserve the interest of its owners, independent of dominating influences the wishes of any powerful eastern corporation might prompt them to exert for their own paramount or exclusive advantage.

### New Railway in Russia.

The new railway from Odessa to Balda, uniting the frontier of Poland with that great emporium of the Black Sea, and southern Russia with the other parts of the empire, was recently inaugurated with great *eclat* in presence of all the great dignitaries of state and the representatives of foreign governments. This railway will give a fresh impetus to the agricultural labor of southern Russia and the manufacturing industry of Poland and the other parts of the country. The slow transportation of goods from the Russian and Polish manufactories hertofore threw the import trade of Odessa almost exclusively into the hands of English, French, German, and Swiss manufacturers.

### Petroleum Items.

It is stated by a prominent oil operator, in Venango county, that the average cost of sinking a well is $10,000; that the minimum cost of operating a well is $20 per day, that a 10 barrel well will not pay unless it be very near a railroad or river, and oil be selling at a high figure; and that when half the oil is given as a royalty, less than a 20 barrel well will not pay the owner for sinking it.

Somebody has been figuring the oil business. He states "from observation and experience" that not one well in twenty-five returns the cost to its owner, that more money has been sunk in the oil business than has ever been realized, and that every gallon of oil taken from the ground has cost, in the aggregate, more than received for it.

The two oldest and perhaps most famous farms in the Venango oil regions, Tarr and Egbert, are now producing a total of about 1,800 barrels per day. The former is estimated at 1,000 and the latter at 800. Tarr farm once rejoiced in a 2,000 barrel well—the "Phillips;" and Egbert was honored by the 'Coquette"—a 550 barrel well. But these wells are now producing, the former 200 and the latter 75 barrels daily.

In Kentucky, the Davis well, on the Hammer farm, Barren county, is said to be improving daily. The Glasgow Times reports increasing excitement over oil manifestations on Beaver and Boyd's creeks. The Cave City Company have struck oil at their well on Beaver creek, at a depth of 500 feet. The Boyd's Creek Petroleum Company's well on Boyd's creek is flowing 25 barrels per day. The Indianapolis & Louisville Company's well, on the Kinslow farm, Boyd's creek, is pumping 20 barrels per day. The Barren River Company's well, on Scivener farm, Boyd's creek, is pumping 10 barrels Eight miles from Burksville a flowing well has been opened. Another is flowing on Crocus creek; the Cumberland & Tennessee have another on Obey River. A 5 barrel well is flowing on Bear Creek. At Creelshoro there is a fifty barrel well not flowing however, but pumping at 112 feet. On Crocus creek there are five thousand barrels in tanks, and no barrels. It is thought there are eight or ten more thousand barrels ready for shipment. The Crocus well, in Cumberland county, Kentucky—just across the line from Overton county—is now reported at two hundred barrels per day, and the Bear Creek fifty barrels.

In California the total amount of oil produced in 1865, was 60,000 gallons.

A well has been struck on Eagle Creek, Overton county, Tennessee, which, at a depth of only seventy five feet, sent up a column of oil ten feet bigh, and still flowing.

### Pittsburg Fort Wayne & Chicago Railway.

The following is a statement of the approximate earnings of this Company during the month of January ult., compared with the same period of last year.

| | 1866. | 1865. |
|---|---|---|
| From Freights | $352,920 93 | $427,067 40 |
| " Passengers | 176.397 50 | 236,772 07 |
| " Express matter | 9,928 12 | 9,346 87 |
| " Mails | 7,825 00 | 7,825 00 |
| " Rent of Railway | 7,083 33 | 7,083 33 |
| " Miscellaneous. | 1 333 60 | 2,049 52 |
| Total | $555,488 48 | $690,144 19 |

### The Mauritius Railways.

Two sections of the system of railways in course of construction in the Mauritius have now been completed and opened for traffic—viz: the Northern and Midland. With the exception of some trifling additions required to complete the terminal works in Port Louis, the whole undertaking is now complete. The traffic upon the line is reported to be highly satisfactory, and considerably in advance of the expectations which had been formed. The Northern line is 36½ miles, the Midland 34 miles long. The estimated cost of the whole system was £1,300,000. Of this sum £600,000 has been raised by loan, on debentures of 7 per cent., in this country. A sum of £300,000 of accumulated surplus of the colony was also applied to the cost of the railways. A further sum of £400,000 was authorized to be raised by loans on debentures. Of this sum the Crown Agents for the colonies are offering £100,000 The security offered is most undoubted. It is, in fact, a twofold one—the railway itself, and the general revenue of the colony. There is probably not one of the British colonies which at the present time is in a more prosperous condition than the Mauritius The quantity of sugar produced in the island is enormous, and the value of its trade exceeds £5,000,000 per annum, or much larger than the trade of some of the States of Europe. The engineer to the line is Mr. Hawkshaw, and the contractors are Messrs. Brassy and Wythes. The works have been constructed in a thoroughly sound and substantial manner. — *Railway News.*

### Hannibal & St. Joseph Railroad.

Immediately upon accepting the position, Supt, Mead has gone quietly to work, with that energy characteristic of the man to put the road in good condition. During the summer there was so much rain that it was difficult to keep it in running order and but little time was afforded him to perfect the improvements he had undertaken. Still the change is already apparent. New ties have been put down over the greater portion of the road, bridges have been strengthened, and other repairs made, costing the company near a half million dollars more than their entire receipts for a year, and trains run with more regularity and safety than at any time since the completion of the road. Contracts have been made for the rebuilding of all the bridges along the road, and repairs of the road bed, putting down new rails, ballasting, etc., are being pushed forward with considerable energy, and it is confidently expected that by the first of June next, the Hannibal & St. Joe railroad will be efficiently equipped, as it is already efficiently managed, as any road in the West It is the intention of Superintendent Mead as soon as the repairs are sufficiently completed to do so with safety, to shorten the running time between Quincy and St. Joseph about six hours—a consummation that will be immensely popular with the traveling public. Considering the many disadvantages under which Superintendent Mead has labored since his connection with the road, the progress he has made is truly wonderful, and we are satisfied that he will eventually make his road inferior to none in the West—a safe and speedy route for travelers bound east or west.

Steel rails are to supersede iron rails on the Philadelphia Wilmington & Baltimore railroads.

### A Railroad from Peoria to Rock Island.

Some years ago a charter was obtained for a railroad from Rock Island to Peoria. Under this charter the work was commenced on the Rock Island end of the route. In course of time the road was put into operation a few miles to a place called Coalville, and then passed out of the hands of the company. Since then it has been used for the purpose of transporting coal to Rock Island. The owner of this road thinks if the charter of the road is revived and the road built through no difficulty will stand in the way of an arrangement whereby the part finished can become a portion of the whole. Whether the plan of building the road be carried into effect at this time or not, the fact is still plain that in time we shall have a road from here to Rock Island, and this much be done in order to give an outlet and market to a large extent of rich country that is not accommodated by the roads now running from the Mississippi River to Chicago.—*Peoria Transcript.*

### Saratoga & Hudson River R. R.

This road is 40 miles in length, commencing on the New York Central Railroad, three miles east of Schenectady and terminating at Athens on the Hudson River 30 miles below Albany. In May next, or upon the opening of the Hudson River to that point, the Saratoga and Hudson River Railroad, on which the track is now laid, and the ballasting in progress, will be opened for business.

A railway has just been sold for debt, at Dublin. The line was the Wexford & Bagnalstown Railway, twenty-one miles in extent, and in perfect working order. Creditors, to the amount of £67,000, were either present personally, or by representation. The line was knocked down to a harrister for the sum of £25,000.

The Buffalo Express says that the Directors of the New York Central Railroad have resolved that the sleeping car company shall hereafter pay 40 per cent. of their gross earnings to the railroad for the transportatinn and privileges which heretofore they have enjoyed free of cost.

### Texas Railroads.

A recent Galveston paper thus sums up the railroads of Texas:

| | |
|---|---|
| Galveston to Houston | 40 miles |
| Houston to Milican | 80 " |
| Harrisburg to Allentown | 80 " |
| Houston to Columbia | 45 " |
| Hampstead to Brenham | 30 " |
| Houston to Beaumont | 75 " |
| Marshall to Shreveport | 40 " |
| Total in operation | 390 " |

Besides these there are reported in progress a line from Indianola to Victoria, 40 miles, and a line from Brazos Santiago to Brownsville, thirty miles. The newest project proposed, is a railroad from Galveston to Kansas City.

### The Covington and Ohio Railroad.

One of the most important branches of the general plan of internal improvements in this State is undoubtedly that which looks to the completion of the Covington and Ohio Railroad, so as to secure the connection of our railroad system with the Western States.

### Railroad Improvements.

The total number of miles of railroad laid in the United States was, at the close of 1864, nearly 35,000 miles, compelling an expenditure of $1,264,366,000. The Boston *Commercial* gives the following table of the railroads in the various States:

| | Miles. 1860. | Miles. 1864. | Total cost. 1864. |
|---|---|---|---|
| Pennsylvania | 2,598 | 2,359 | $170,080,000 |
| Ohio | 2,945 | 3,300 | 117,583,000 |
| Illinois | 2 799 | 3 156 | 120,417,000 |
| New York | 2 684 | 2,820 | 135 887,000 |
| Indiana | 2,163 | 2,195 | 71,295,000 |
| Georgia | 1 419 | 1,419 | 29 380,000 |
| Virginia | 1,378 | 1.378 | 32,905 000 |
| Massachusetts | 1,264 | 1,285 | 49,051,0 0 |
| North Carolina | 938 | 938 | 19,129 000 |
| South Carolina | 973 | 973 | 22,053 00 |

The longest lines are reported as follows:

| | Mileage. | Cost. |
|---|---|---|
| Illinois Central | 708 | $28,610,000 |
| New York Central (branches) | 5 5 | 32,740,000 |
| Chicago, N. W. Galena & Elgin | 535 | 2 [illegible]000,000 |
| Erie and Branches | 528 | 30,328,000 |
| Mobile & Ohio | 432 | 14,484,000 |
| Pittsburg, Ft Wayne & Chicago | 487 | 18 801,000 |
| Chicago, Peoria & Quincy | 420 | 59,270,000 |
| Baltimore & Ohio | 366 | 24,919 000 |
| Pennsylvania Central (Columbia Div.) | 359 | 26 058 000 |
| Atlantic & Great Western (branches) | 290 | 7,000,000 |
| Memphis & Charleston | 290 | 67,4 0,000 |
| Louisville & Chicago | 288 | 7,000,000 |
| Philadelphia & Erie | 288 | 16,500,000 |
| Michigan Central | 284 | 13,805 000 |
| Mobile & Ohio, from Alabama | 282 | 8,175,000 |
| Marietta & Cincinnati | 272 | 10,722,000 |
| Milwaukie, St Paul & Horicon | 251 | 8,144 000 |
| Louisville & Nashville | 253 | 8,730,000 |
| Philadelphia & Reading (branches) | 154 | 21,735,000 |
| Philad'a, Wilm'gton & Baltimore | 98 | 8,575,000 |

The great Parisian acqueduct, one of the memorable works of Napoleon's reign, is completed. By it the waters of the river Dhuis are brought, eighty four miles, to the French capitol. Seventy four miles are solid masonry, and nearly ten miles are cast-iron conduits. The whole was completed at a cost of sixteen million francs, or three million two hundred thousand dollars. The acqueduct was commenced on the 1st day of June, 1863, and for speedy construction and moderate cost, compares most advantageously with any modern work of like character.

A California Railroad Grant.—Mr. Conness (Cal.) introduced a bill to grant land for the construction of a railroad from San Francisco Bay to Humboldt Bay in the State of California, which was referred to the Committee on Public Lands.

### New Railroad Projects.

We take the following from the Vermillion County (Indiana) *Hoosier State* of the 1st inst:

Since the railroad line proposed to be built from Chicago to Danville, Ill., has, from the spirit shown by the people, become almost a certainty, parties have become interested in continuing the line as an iron and coal road through our country to Rockville. This link of about 25 miles passing over an iron foundation, and its entire length through a region filled with coal, of a quality not equalled by any west of the mountains for the smelting of iron, becomes at once of vast importance to connecting roads.

We understand that the President and Directors of the E. & C. R R., regarding this route favorably, have intimated that they would undertake to build the road from Rockville to Newport if those interested at Danville and intermediate points would complete the connection.

### Railways in Italy.

In 1867 the proverb which says that "All roads lead to Rome!" will be literally applicable, as the railway lines all arrive there. Thus besides the line from Ancona to Rome, which will be finished in three or four months, Florence will also be connected with the Eternal City by the Aarezzo line, which runs to Perugia, and by the Siena one, which crosses the Appenines to Ficulla. From Leghorn, a railway along the coast already reaches the Pontifical frontier, and lastly, Naples has been for a considerable time in direct communication with the Pontifical capital.

The Supreme Court of the United States yesterday affirmed the decision of the Circuit Court in the case of the City of Cincinnati vs. the Ohio & Mississippi Railroad Company. The decision was against the city. The city of Cincinnati, it will be recollected, loaned the Company a large amount of money, and took a first mortgage on the road as security. This was done by a vote of the people, under an act of the Legislature Subsequently the City Council canceled the mortgage, and accepted as security for the loan, one million dollars of stock of the Company. This change of securities, it was claimed, was illegal, and the suit was brought to enforce the claim against the Company under the first mortgage. The District Court here decided in favor of the railroad, and its decision is affirmed in the Court of last resort. The city, therefore, has no other security for $600.000 than $1,000,000 of stock, which is convertible into certificates at the rate of ten cents on the dollar. These certificates are worth twenty-five cents on the dollar.

### Important Railroad Bills Passed.

Trenton, N. J., February 15.

The Newark and New York Railroad Bill passed the House this morning by a vote of 31 to 21. The result was received with great applause.

The House of Assembly, late last night, after a stubborn fight, passed a bill ratifying the lease of the Morris and Essex Railroad to the Atlantic and Great Western Railway.

Lake Commerce.—The commerce of the lakes during the past year was enormous. Thirty-five millions of bushels of grain were carried over them to market; two millions of hogs; five hundred thousand cattle; two hundred million feet of lumber; besides the iron and copper of Lake Superior, and the immense amount of merchandise that sought a western market.

### Atlantic & Mississippi Steamship Line.

Since the formation of the Atlantic & Mississippi Steamship Company, it has lost the following steamers: John J. Roe, by running on a sunken wreck; Empress, snagged; James White, snagged; Ben. Stickney, sunk; Niagara, by collision with steamer Post Boy; and, last, the Missouri and W. R. Carter by explosion. These represent a value of about $800,000. The company have also broken up the City of Memphis and Hannibal, they having become worn out.

The Vicksburg & Shreveport (La.) Railroad was recently sold to Mr. Ludling for $50,000.

### The West vs. the East Side of the Hudson.

There seems to be a small railroad war waging at present between the Hudson River Railroad Company and the Harlem Railroad Company on the one side, against the New York Central corporation and the various links embracing the Athens and Schenectady road, the Athens and Newburg, and the Newburg and Jersey City tracks, which together are to form the new route on the west bank of the Hudson river, connecting with the Central road at Schenectady. The latter company are striving to get control of the various lines on the west bank, in order that they may send all their freight by that route without being subject to the dictation which now embarrasses them. On the other hand, it is said that the Harlem and Hudson River Companies are making great efforts to secure a controlling influence in the New York Central, so that they may be able to maintain the Western business. Dean Richmond and Cornelius Vanderbilt are the principle representative combatants.—*New York Herald, February* 14.

[Dean Richmond is undoubtedly right in aiming to provide a route under "Central' influence on the west shore of the Hudson, in preference to an alliance with the Harlem or Hudson river lines on its east shore. All the lines out of New York, that carry for Western account, have a common interest in concentration at Jersey City and Hoboken; because difficulties annually increase against the Hudson River and Harlem roads from the spread of population up their routes, whereas from Jersey City and Hoboken the commercial portions of New York are accessible by ferry boats, to North river piers, at all desirable points.

The New Jersey Central, the Morris and Essex and the Erie lines all now terminate on the West bank of the Hudson, opposite New York City.—*U. S. R R. and Mining Register.*

### Ohio and Lake Superior Railroad.

We alluded, a short time ago, to the project of building a railroad from this city via Saginaw and Mackinaw to the head of Lake Superior, and stated that it was supposed Mr. Latourette, of Fenton, Mich., was one of the leading spirits of the enterprise. This gentleman has written a lengthy communication, which appeared in the *Detroit Advertiser*, in which, after speaking of the proposed route, he says he wishes it distinctly unperstood, as the 'record' of this company, that they propose either to bridge or tunnel the Straits of Mackinaw, so as to afford a railroad passage. He estimates that this bridge or tunnel can be constructed for $15,000,000, and predicts that the wants of trade and commerce will demand it; Detroit, and the interests of the upper and lower peninsulas will demand it; the Pacific seaboard, the Atlantic seaboard, and Asia and Europe demand it; and ventures the further prediction that "the time will come when cars will pass from Puget's Sound to Boston without ferriage or breaking bulk."

"Immense land grants and a Government loan will be asked for; he says they are necessary, but is not expected that this aid will extend to that part of the route from Toledo to Saginaw. The aid desired is the same as that sought for the North Pacific Railroad."—*Toledo Blade.*

Pacific Railroad Bonds.—The Vice President of the Pacific Railroad has received from the Treasury Department six hundred and forty thousand dollars in bonds on the completion of the first forty miles of the road.

### The Steam Railroads of Massachusetts.

The following statement of the condition of the steam railroads of Massachusetts, and their operations in 1865, is compiled from the last annual returns of the different corporations, made to the Legislature:

| | |
|---|---|
| Capital Stock, | $78,075,405 |
| Capital paid in, | 65,565,482 |
| Debt, | 25,068,218 |
| Cost of roads and equipment, | 72,175,091 |
| Total income in 1865, | 18,974,944 |
| Working Expenses, | 12,801,757 |
| Net earnings, | 6,173,157 |
| Interest paid, | 1,164,179 |
| Amount of dividends paid, | 3,872,317 |
| Surplus, Nov. 30, 1865, | 5,562,486 |
| Total length of rail (as single track) in miles, | 1,975 |
| Tons of freight carried, | 5,277,563 |
| Number of passengers carried, | 20,278,055 |
| Number of passengers killed, | 21 |
| Number of persons employed, exclusive of those ehgaged in construction, | 7,977 |
| Number of employees killed, | 26 |
| Number of persons killed while walking or lying upon the track, | 45 |
| Number of engines owned, | 471 |
| Number of passenger cars, | 573 |
| Number of merchandise cars, | 8,612 |

Among the dividends declared for 1865 were the following: Boston and Worcester, 10 per cent.; Western, 10; Providence, 10; Lowell, 5½; Maine, 8; Connecticut River, 8; Eastern, 6; Fitchburg, 7; Fitchburg and Worcester, 6; Nashua and Lowell, 8; New Bedford and Taunton, 8; Norwich and Worcester, 9; Old Colony and Newport, 8; Providence and Worcester, 8; Taunton Branch, 8; Worcester and Nashua, 9½.

The amount paid by the different corporations in 1865 for taxes and insurance was $1,327,134. The expenses of removing snow and ice from the track was $22,704.

Of the fatal accidents to passengers (21) not one was caused through any negligence or carelessness on the part of the employees of the railroad companies.

The Western Railroad Company carried 1,010,373 passengers over their road in 1865: passengers killed, 2, number of employees, 1,628, exclusive of those engaged in construction; employees killed, 3; number of engines owned, 78; number of passenger cars, 45; number of merchandise cars, 1,170; amount paid for taxes and insurance, $238,719; removing snow and ice, $7,941.

The number of passengers carried over all the roads in 1864 was 18,206,423; increase in 1865, 2,072,032.

### Philadelphia Railroads.

Philadelphia is the headquarters of the Pennsylvania Railroad Company, the Camden and Amboy Railroad Company, the Philadelphia and Reading Railroad Company, the Lehigh Valley Railroad Company, and the Philadelphia, Wilmington and Baltimore Railroad Company. These five companies have all prospered under a comprehensive policy of expansion, whereby they have enlarged the era of their influence, and increased their income in a ratio almost without example in other cities

Besides the five companies named, there are two other potential corporations whose works are mainly in Pennsylvania, to-wit:—the Delaware, Lackawanna & Western R. R. Co. and the Northern Central Railroad Company. The first of this twain owns a road from the Delaware river below the Water Gap via Scranton to Great Bend, and controls the line from Scranton via Kingston to Northumberland. The other owns the road from Baltimore to Sunbury, and operates under lease the road from Williamsport to Elmira.

In the northwest portion of the State, the Atlantic and Great Western Railway Company already occupy important territory, under a programme which reaches (by rail and by contract) from Chicago and St. Louis to Philadelphia and New York.

At Pittsburgh, two great lines come together from the West, via Fort Wayne and Columbus. And so all over the State important counties are traversed by iron ways belonging to corporations that are only in the beginning of a career which imposes elongation of mileage as one of the necessities of situation and duty; for developments are everywhere occurring throughout the Commonwealth.

Whether the State could be districted among existing railroad corporations, is a question; four east and west lines might satisfy for a half score of years, and if four east and west lines were now in operation there would be "nobody hurt!"—*U. S. Railroad and Mining Register.*

### Lumber Trade of Saginaw.

From Salina to the mouth of Saginaw river there are 56 mills in operation, of which two were burned early in the season—Paine's at Saginaw City, and Rust's, at Zilwaukie. There are being built 4 new mills on new sites, and rebuilding the burnt ones, together with an early start for Sage & McGraw, and Shaw & Williams will increase the capacity 30,000,000, besides the mills on the Tittabawassee, Cass and Bad rivers, where lumber comes to Saginaw for shipment, and will add 30,000,000 more, making a round total of 360,000,000 capacity for Saginaw & tributary rivers.

The Tittabawassee rafted out 150,000,000; Cass river, 50,000,000; Flint, 30,000,000, and Bad river 20,000 feet of pine saw logs, board measure, besides which was some from the Bay.

Of shingle mills there are 14 on Saginaw, Cass, and Tittabawassee rivers, making last year 60,000.

The 56 mills sawed last year 250,348,000 feet of lumber, and had on hand January 1, 1866, 41,453 000 feet, of which there was sold on dock 22,362,000, leaving 19,091,000 feet unsold.

The following are the number of feet of logs in Boom—Forest City, 500.000; Green and Harding, 200,000; Taylor, 1,000,000; A. W. Wright, 750,000; Rust 250,000; Sutherland, 25,000; Curtis & Corning, 300,000; G. C Warner & Co., 1,250,000; Lee's, 60,000; Merrill's, 1,500,000; Shaw & Williams, 500,000; W. R. Burt, 150,000; Gordon & Weaver, 250,000; Huron S. & L. Co., 200,000; Sage & McGraw, 3,000,000; Bolton, 600,000; T. & Monthrop, 150,000; Moor & Smith, 500,000; Youngs, 100,000; Miller & Post, 300,000; Peter & Lewis, 60,000; Rust, 500,000; N. B. Bradley, 1,000,000; W Peters, 300,000; A. Miller, 150,000; Fay, 250,000; James Sherer & Co., 20,000; Pitts, 700,000; McEwen, 600,000. Total, 15,165,000.—*Detroit Tribune.*

The completion of the Memphis and Charleston Railroad to Memphis, and the New Orleans and Northern Railroad between Grand Junction and New Orleans, opens to travelers and shippers an all rail route from the northern cities to Memphis, Vicksburg, Mobile and New Orleans, whereby the dangers and delays of river travel may be avoided.

### RAILROAD ITEMS.

Hard Weather on Railroads.—The late extreme cold weather has been quite detrimental to railroad running stock. On the Cleveland & Columbus Railroad, alone, five locomotives were broken down in one day, owing to the intense cold. Trains have been put upon running time, more with regard to safety than schedule time.

All the railroads in Alabama have been repaired, except the Selma & Meridian. The repairs on this road near Demopolis and the bridge over the Tombigbee are being rapidly pushed forward.

The House has passed the Senate bill providing that in case the Burlington & Missouri river Railroad Company shall complete the section of twenty miles by the 1st of Dec., 1866, it shall be entitled to the proportion of land provided by law.

In the Court of Common Pleas Allegheny City, Pennsylvania, Judge Sterritt has granted an injunction to restrain the city of Allegheny from interfering with the Western Pennsylvania Railroad Company, in building thier road through the city.

The Baltimore & Ohio Railroad Company have purchased half of the Lexington & Big Sandy Road and intend finishing the entire road in two years.

☞ The completion of the bridge of the Adirondack Railroad Company across the Sacondaga was celebrated at Luzerne, on the 2d inst. This bridge, Howe's Patent Truss, is ninety-eight feet from the water, and spans a chasm five hundred and seventy feet wide. It was commenced the 15th of November last, and completed February 1st. The builder is Mr. H. L. Lacey.

Steamboat Losses.—The number of steamboats lost on the Western and Southwestern rivers, since the 18th of December last, is twenty-five, valued at $1,140,000. In addition to this, three wharf boats and ten barges have been lost, valued at $57,000.

The Atlantic and Great Western Railway Company have purchased the Richmond and Chicago road, and intend laying down a double track from Dayton to Richmond, and make a continuous broad gauge line from New York to Chicago.

The Directors of the Port Huron and Lake Michigan, and the Chicago and Michigan Grand Trunk Companies, met in Detroit on the 3d inst., and considered a proposition for merging the two organizations in a consolidated company, to extend from Port Huron to Chicago.

The St. Paul and Pacific Railroad, and the Minnesota Valley Railroad have both been obliged to suspend operations on account of the snow.

High Freights—The Atlanta Intelligencer publishes the following freight charges on parcels from New York to that city:

| | |
|---|---|
| Freight from New York to Savannah | $7 60 |
| Charges in Savannah | 1 95 |
| Freight and charges from Savannah to Augusta | 134 68 |
| Charges of Georgia R. R. Company | 27 00 |
| Total | $171 23 |

The Winona & St. Peter R. R. paid into the State Treasury, during the past year, three per cent. on gross earnings, in lieu of tax, which amounted to the sum of $4,550.14.

A company has been formed to connect Wilmington, Del., by railroad with the Reading Railroad, so as to convert it into a coal port which is open at all seasons, the ice of the winter never having blocked up its approaches.

The Jackson (Mich.) *Citizen* says the railroad from that City to Lansing will be completed this week, with cars running through.

The Buffalo *Courier* asserts that the Buffalo branch of the Atlantic & Great Western Railway from Buffalo to Randolph will be continued down the Conewango to Warren, Penn.

Sir Morton Peto has made a contract with the Emperor of Russia to construct a great central railway, to unite the heart of the Empire with the Baltic Sea, and with all the German and continental railways.

It is reported that the Chicago, Alton & St. Louis Railroad Company proposes to buy the charter of the St Louis & Cairo road, thus giving two through lines from Cario to Chicago, without change of cars.

Work on the Hoosac tunnel, which was suspended last fall on account of the flow of water, has been resumed again. The new shaft has been sunk 40 feet, and the central shaft 255 feet.

WHEAT.—There were 8,012,565 bushels of wheat shipped from Minnesota during the navigable season of 1865.

☞The Kentucky Legislature have passed a bill authorizing the Louisville and Lexington Railroad Company to build a branch road from Smithfield to Covington.

☞ A bill to allow passenger railroad cars to run on all days of the week, was recently introduced into the Pennsylvania State Senate, and referred by the Speaker to the Committee on Vice and Immorality, because the hill had reference to the morality of the community.

☞ The time for receiving proposals for the grading, etc., of 190 miles of the American Central Railway, as will be seen by the advertisement in another column, has been extended to the 5th March prox.

☞ The branch of the Cleveland and Toledo Railroad from Elyria to Oberlin, will be completed by the 1st of June next.

☞ The rebnilding of the railroad bridge over the Roanoke river on the Weldon railroad is progressing rapidly. It will be 1,750 feet in length of 11 spans

☞ The Legislature of Tennessee has recently passed a bill loaning the Memphis and Ohio Railroad Company $400,000, to enable it to rebuild the bridge at the Cumberland and Tennessee rivers, and put the road in thorough repair to Paris.

☞ The gauge of the Piedmont Railroad is to be altered to five feet, so as to correspond with that of the Richmond and Danville Railroad.

The loss by the burning of the United States Express car, on the Erie Railroad, January 30, is estimated at $200,000. An overland mail for the Pacific coast was destroyed.

## MONETARY AND COMMERCIAL.

The demand for money for general business purposes has been fair, with a limited though adequate supply. There is no disposition manifested to engage in any speculating movement, hence the market is comparatively quiet, notwithstanding it is close. Bankers are firm in their rates, ranging from 8 to 12 per cent. to customers. Exchange is firm and in demand beyond the ordinary source of supply hence currency has to be shipped to keep up the supply. Quotations are:

| | Buying. | Selling. |
|---|---|---|
| New York | 50 prem. | 1-10 prem. |
| Philadelphia | 50 prem. | 1 10 prem. |
| Boston | 50 prem. | 1-10 prem. |
| Gold | 137 | 137½ |
| Silver | 128@130 | 131@132 |

In New York, says the *Tribune*, money is more active, and no new business is done on call under 6 ℘ cent. The private advices from London are not encouraging, and make tenders here prudent about long engagments. In commercial bills no change. Best names pass at 7@7½, good at 8@9, and fair from 10 to 15, and even higher. Paper is carefully scrutinized, and safety rather than large interest is the rule with buyers. Late in the day there was a sharp twist in money, and 7 ℘ cent was freely paid for large amounts, and a number of houses had difficulty in making up their accounts—applications being made freely after the close of bank hours.

The trade of the city is very irregular, and in amount does not equal the anticipations of importers and jobbers. There is a large demand for goods for the South, such as are required for the production of cotton, and handsome profits are reported.

At 2 o'clock the rates of money advanced to 7 per cent, and it was in active demand up to 3½. This had the effect of depressing the share-market, and a pressure to sell was observed. At the Second regular Board there was a strong desire to sell, and the clique stocks were freely offered at from 1@1½ per cent decline from the morning prices. Rock Island, Michigan Southern and Fort Wayne were especially weak, and were freely offered at quotations, buyer's option. The market closed dull and heavy at quotations: New-York Central, 91¼@91⅜; Erie Railway, 80⅛@80¼; Hudson River, 102@102¼; Reading, 99⅞@100; Michigan Southern, 69¼@69⅜; Cleveland & Pittsburg, 78¼@78⅜; Rock Island, 103@103⅛; North-Western, 27@27⅛; North-Western Preferred, 54⅝; Fort Wayne, 92⅛@92¾; Ohio & Mississippi Certificates, 26; Canton, 44; Cumberland Coal, 44¼@44⅝; Quicksilver, 41@41¼; Mariposa Mining Co., 12@12¼; do. Prefered, 16; Schuylkill, 18¼.

The earnings of the Indianapolis & Lafayette Road for the year 1865 were $633,334, upon which the Company paid an internal revenue tax of $15,833 25.


# Oil Lands

IN

## Kentucky & Tennessee,

FOR SALE BY

WRIGHTSON & CO.

167 *Walnut Street,*

CINCINNATI.

## The Old And Reliable Route.

**Through to Pittsburg without Change.**

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD, in connection with the Cincinnati, Hamilton & Dayton and Little Miami Railroads, still continues to transport produce and merchandise between Cincinnati and Pittsburg, Philadelphia, Baltimore, New York or Boston, and all Eastern points, with the greatest promptitude and dispatch.

For Rates, Bill of Lading, or any information desired shippers will please apply to

H. W. BROWN & CO.,
No. 22 Broadway, Cincinnati.

J. J. HOUSTON, General Freight Agent,
my11 Pittsburg, Pa.

## Change of Time, Monday, Aug. 7th.

THE

## Atlantic & Great Western Railway

WILL COMMENCE RUNNING TWO THROUGH TRAINS between Cincinnati and the EASTERN CITIES passing through the celebrated OIL REGIONS OF PENNSYLVANIA.

Leave Cincinnati at.....9:40 A. M., and 10:50 P M
Arrive at Cincinnati.....6:30 A. M., and 7: 0 P. M.

The engines, cars and other equipments of the Line are entirely new, of the most modern, substantial and approved descriptions, unequalled by any Railway on this Continent

Sleeping Cars on night trains.

☞ Trains leave from and arrive at the New Passenge Depot of the

*Cincinnati, Hamilton & Dayton Railway.*

For Through Tickets and Baggage Checks, please apply at New Depot of C. H. & D. Railway, or at northeast corner Broadway and Front streets, or at No. 89 West Fourth street, Cincinnati.

D McLAREN, General Superintendent.
E. F. FULLER, General Ticket Agent. my11

## WRIGHTSON & CO.

# Printers,

167 Walnut St., Cincinnati, O.

# RAILROAD OFFICES AND AGENTS

**Atlantic & Great Western Railway.**

D. C. Henderson, General Through Freight Agent.
H. P. Clough, Freight Agent, No. 80 West Fourth St

**Little Miami & Columbus & Xenia, and Cincinnati, Hamilton & Dayton.** } Consolidated.

P. W. Strader, General Ticket Agent, S. E. C. Front & Broadway.
A. Hamilton, Ticket Agent, s. e. c. Front & Broadway.
Jno. Glazier, " " Cor. Vine and Burnett.

**Indianapolis & Cincinnati.**

F. F. Lord General Ticket Agent, N. W. Cor. Third & Vine, under Burnett House.

**Marietta and Cincinnati.**

A B Waters, Freight and Ticket Agent, Cor. Third and Walnut

**Ohio & Mississippi**

W. E. Bruce, Freight and Ticket Agent, Gagette Building, 82 West Fourth Street
Elmer Jackson, Ticket Agent, No. 2 Broadway, opp. Spencer House.

**Little Miami & Columbus & Xenia.**

J. N. Kinney, General Freight Agent, East Front St Depot
E. Clark, Local Freight Agent, East Front St. Depot.

**Cincinnati, Hamilton & Dayton, and Dayon & Michigan.**

J R. Reed, General Freight Agent, Sixth St. Depot
H. P. Clough, Contracting Agent, No. 80 Fourth St.

**Cincinnati & Chicago Air Line.**

—Kellogg, Contracting Agent, Vine St. under Burnett House.
H. J. Page, General Freight Agent, at Chicago.

**Indianapolis & Cincinnati.**

T. C. Spooner, General Freight Agent, 66 W. Third St.
Sydney Rice, Contracting Agent, " "

**Central Ohio & Pittsburg, Columbus and Cincinnat**

James E Shields, General Agent, No 77 W. Third St.

**Cleveland, Columbus & Cincinnati.**

T. J. Gettier, Freight Agent, No. 4 Merchants' Exchange.

**Cleveland, Col. & Cin., and Lake Shore Railroad.**

N. C Harris, Passenger Agent.

**Cleveland, Col. & Cin. Lake Shore and Erie Railway.**

Gen. Pendleton, S. W. Freight Agt, No. 4 Merchants Exchange.

**Erie Railway.**

A. J. Day, S. W Passenger Agent, No. 4 Mercha Exchange.
G. G Cooke, Local Passenger Agent, No. 4 Merchants Exchange.

**Hannibal & St. Joseph.**

J. W. Burch, General Eastern Agent, No. 2 Burne House.

**Sandusky, Dayton & Cincinnati.**

No. 80 West Fourth Street.

**Eaton & Hamilton.**

Sixth St. Depot.

**Greenville & Miami.**

Sixth St. Depot.

**Logansport, Peoria & Burlington.**

—Kellogg, Contracting Agent, Vine St. under Burnet House.

**New York Central.**

G. B Gibson, S. W. Passenger Agent. W. H. Page, Local Passenger Agent, 8 and 9 West Third St.
Geo. S. Brecount, Contracting Agent.

**Cincinnati & Indianapolis Junction Railroad.**

H. P. Clough, Passenger and Freight Agent, No 80 West Fourth St.

**Pennsylvania.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Pittsburgh, Fort Wayne and Chicago.**

H. W. Brown & Co., Contracting Agents, Broadway, opp. Spencer House.

**Baltimore and Ohio.**

H. Heckert, Gen. Western Agent, No. 5 East Front St.

**Grand Trunk Railway, Canada.**

Taylor & Brothers, Agents, 45 Walnut St.

**Covington and Lexington.**

Depot in Covington.

# 1865.

## CHANGE OF TIME!

By the Broad Road Gauge Route, the

# Atlantic & Great Western R'y.



## TWO THROUGH TRAINS DAILY

TO

## EASTERN CITIES!

| JULY 1, 1865. | Day Exp. | Night Exp. |
|---|---|---|
| Leaves CINCINNATI | 9:00 A. M. | 10:40 P. M. |
| HAMILTON | 9:57 " | 11:43 " |
| DAYTON | 11:30 " | 12:55 A. M. |
| SPRINGFIELD | 12:35 " | 1:45 " |
| URBANA | 1:40 P. M. | 2:15 " |
| GALLION | 5:25 " | 6:10 " |
| MANSFIELD | 6:50 " | 7:15 " |
| AKRON | 9:30 " | 10:00 " |
| RAVENNA | 10:05 " | 0:40 " |
| LEAVITTSBURG | 11:00 " | 11:40 " |
| GREENVILLE | 12:15 A. M. | 1:00 P. M. |
| MEADVILLE | 1:20 " | 2:30 " |
| CORRY | 2:45 " | 3:55 " |
| Arrives SALAMANCA | 4:58 " | 2:55 " |
| NEW YORK | 10:30 P. M. | 1:00 " |
| BOSTON | 2:30 " | 8:00 A. M. |
| PITTSBURGH | 2:20 A. M. | 3:20 P. M |
| HARRISBURG | 1:30 P. M. | 2:45 A. M. |
| PHILADELPHIA | 5:35 " | 6:55 " |
| BALTIMORE | 5:45 " | 7:00 " |
| WASHINGTON CITY | 9:05 " | 10:35 " |

☞ The NIGHT EXPRESS leaves Sunday night instead of Saturday night. All other Trains leave Daily, Sundays excepted.

DIRECT CONNECTIONS } At Salamanca with Erie Railway. At Mansfield with Pitts., Ft. Wayne and Chicago Railroad.

## THIS IS THE ONLY ROUTE

TO THE

## OIL REGIONS OF PENNSYLVANIA

Passengers to the Eastern Cities will find the

## Atlantic & Great Western R'y

A most Desirable Route.

The Engines, Cars, and other Equipments, are entirely new, of the most modern, substantial, and approved description, unequaled by any Railway on this continent.

### SLEEPING CARS

Provided for all Night Trains, and Smoking Cars for Trains.

**Ample time is allowed, at all hours, for meals.**

No effort will be spared by the Company to render a trip over the Road pleasant and comfortable to the Passenger.

### CONNECTIONS ARE CERTAIN!

FOR THROUGH TICKETS AND BAGGAGE CHECKS,

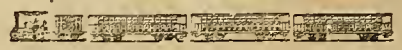
Apply in Cincinnati at New Depot of Cincinnati, Hamilton and Dayton Railway; or at northeast corner of Broadway and Front streets, and at No. 80 Fourth street, nearly opposite Post Office. Also at any of the principal Railroad and Steamboat Offices, in the West and South-west.

E. F. FULLER, Gen'l Ticket Agt. D. McLAREN, Supt.
J. P. SARVER, } Passen Agents.
CHAS. COOK, }

# CENTRAL RAILROAD

—OF—

## NEW-JERSEY.



Passenger Depot in New-York, foot of Liberty street, and Freight Depot in New-York, Pier No. 2, North River, connecting at Hampton Junction with Delaware, Lackawanna and Western Railroad, and at Easton with Lehigh Valley Railroad and its connections, forming a direct line to Pittsburgh and the West without change of cars.

GREAT MIDDLE ROUTE TO THE WEST.

Two Express Trains daily from the West, except Sundays, when one evening Train.

Sixty miles and Two Hours saved by this line to Chicago, Cincinnati, St. Louis, etc., with but one change of cars.

SPRING ARRANGEMENTS,

Commencing April 24, 1865, leave New York as follows:

At 6:30 a. m., for Easton, Mauch Chunk, Williamsport, Wilkesbarre, Mahonoy City, etc.

7 a. m.—For Bergen Point.

MAIL TRAIN—At 8:00 a. m., for Flemington, Eaton Water Gap, Scranton, Wilkesbarre, Great Bend, Pittston Binghampton, etc.

9:00 a. m. Western Express for Easton, Scranton, Great Bend, Allentown, Reading, Harrisburg, Pittsburgh, and the West, with but one change of cars to Cincinnati or Chicago, and but two changes to St. Louis.

11:00 a. m.; 2:00; 3:30; 5:30; 7:20 and 11:00 p. m. for Elizabeth.

12:00 m. TRAIN—For Easton, Allentown, Manch Chunk, Wilkesbarre, Reading, Pottsville, Harrisburg, etc.

4 p. m.—For Easton, Scranton, Great Bend, Bethlehem, Allentown, Mauch Chunk, Williamsport.

5:00 p. m.—For Somerville and Flemington.

6:20 p. m.—For Somerville.

8:00 p. m. WESTERN EXPRESS TRAIN—For Easton, Allentown, Reading, Harrisburg, Pittsburg, and the West. Sleeping cars through from Jersey City to Pittsburgh every evening

ELIZABETHPORT AND NEW-YORK FERRY.—Leave New-York from Pier No. 2, North River, at 5:00 p. m. Boats stop at Bergen Point and Mariners' Harbor.

Tickets for the West can be obtained at the office of the Central Railroad Company, foot of Liberty street, N. R., at No. 1 Astor House, at Nos. 271 and 526 Broadway, and at the principal Hotels

640* JOSIAH O. STEARNS, Superintendent.

# NEW-YORK AND NEW-HAVEN RAILROAD.

1865. SUMMER ARRANGEMENT. 1865.
COMMENCING MAY 15, 1865.

Passenger Station in New-York, corner Twenty-Seventh street and Fourth Avenue. Entrance on Twenty-Seventh street.

TRAINS LEAVE NEW-YORK,

For New-Haven, 7:00, 8:00 (Ex.); 1:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Bridgeport, 7:00; 8:00 (Ex.); 11:30 a. m.; 12:15 (Ex); 3:00 (Ex.); 3:45; 4:30 and 8:00 (Ex.) p. m.

For Milford and Stratford, 7:00; 11:30 a. m.; 3:45; 4:30 p. m.

For Fairfield, Southport and Westport, 7:00; 11:30 a.m. 3:45; :30 p. m.

For Norwalk, 7:00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.) :45; 4:30; 5:30; 8:00 (Ex.) p. m.

For Darien, 7:00; 9:30; 11:30 a. m.; 3:15; 4:30; 5:30 p. m.

For Greenwich, 7:00; 9:30; 11:36 a. m.; 3:45; 4:40; 5:30; 6:30 p. m.

For Stamford, 7.00; 8:00 (Ex.); 9:30; 11:30 a. m.; 12:15 (Ex.); 3:00 (Ex.); 3:45; 4:30; 5:30; 6:30; 8.00 (Ex.) p.m.

For Port Chester and intermediate stations, 7:00; 9:30; 11:30 a. m.; 3:45; 4:30; 5:30; 6:30; 7 p. m.

CONNECTING TRAINS.

For Boston, via Springfield, 8:00 a. m. (Ex.); 3:00 (Ex. 8:00 p. m.

For Boston, via Shore Line, 12:15 (Ex.); 8:00 p. m.

For Hartford and Springfield, 8:00 (Ex.); a. m. (Ex.); 3:00 (Ex.); 12: 5; 8:00 p. m.

For Connecticut River Railroad, 8:00 a. m. (Ex.); 12:15 p. m. to Montreal; 3:00 p. m. to Northampton.

For Hartford, Providence and Fishkill Railroad, 8:00 (Ex.) a. m.; 12:15 p. m.

For New-Haven, New-London and Stonington Railroad, at 8:00 a. m.; 12:15; 3:00; 8:00 p. m.

For Canal Railroad, 12:15 p. m. to Northampton.

For Housatonic Railroad, 3:00 a. m., and 3:00 p. m.

For Naugatuck Railroad, 8:00 a. m.; 3:00 p. m.

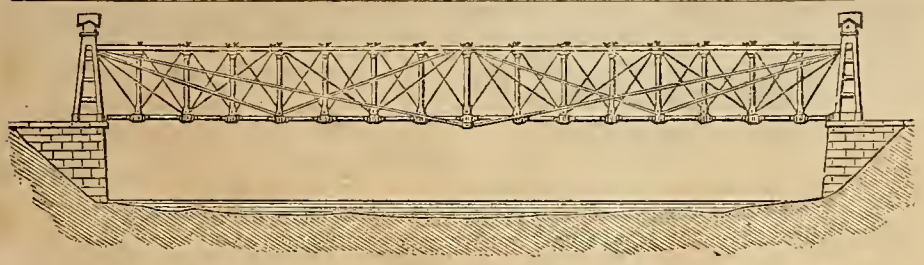
For Danbury and Norwalk Railroad, 7:00; 9:30 a. m.; 4:30 p. m.

Commodious Sleeping Cars attached to 8:00 p. m. train.

JAMES H. HOYT, Superintendent.

NEW-YORK AND HARLEM RAILROAD Trains for Albany, Troy and Saratoga Springs, also connecting with the North and West, leave Twenty-Sixth street Depot at 11 and 5 p. m.

Tickets may be procured at the offices of Westcott's Express in New-York and Brooklyn. Baggage checked from the residence to all points on this road and its connections. 649*



(*Plan of bridge*)

## FINK'S PATENT
## IRON RAILROAD BRIDGE.

THE undersigned is prepared to manufacture and build in any part of the United States, and at reasonable terms,

FINK'S PATENT IRON BRIDGE,

In spans from 20 to 300 feet. The same is favorably known, well tested, and already extensively introduced; is stronger and more economical than any other Iron Bridge in use, requires no repairs, and no adjustment, but is perfectly adjustable.

For plans and particulars, apply to

**C. J. Schultz, Pittsburgh, Pa.**

*Letter Box*, 1392.

---

## HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

*Carriage, Tire, Machine, Plow and all kinds of*

## SCREW BOLTS,

**170 to 180 Columbia St. bet. Elm and Plum, Cincinnati.**

Bridge Bolts, Rivets, of all sizes, Coach Screws and Thresher Teeth, made on short notice and on the most favorable terms.

---

M. W. BALDWIN, MATTHEW BAIRD.

## M. W. BALDWIN & CO.

ENGINEERS,

**Broad and Hamilton St. Philadelphia, Pa.**

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

## LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves strength superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

---

## KNOX & SHAIN,

ENGINEERING & TELEGRAPHIC

INSTRUMENT MAKERS,

**Philadelphia, Pa.**

---

## JOHN HOLLAND,

(Successor to Geo. W. Sheppard,)

MANUFACTURER OF GOLD PENS, GOLD AND Silver Pen and Pencil Cases,

**No. 6 West Fourth St.**

Up Stairs, CINCINNATI, O.

---

**BRIDGES & LANE,**

MANUFACTURERS AND DEALERS IN RAILROAD AND CAR

## FINDINGS,

AND

## MACHINERY,

*Of every description.*

CORNER COURTLANDT AND GREENWICH STS.

**NEW YORK.**

ALBERT BRIDGES. JOEL C. LANE.

---

**BUSH & LOBDELL,**

**Chilled Railroad Car Wheel, Tyre,**

—AND—

**Railroad Machine Works,**

WILMINGTON, DELAWARE,

MANUFACTURE

## Chilled Wheels and Tyres

FOR

**Railroad Cars**

**and**

**Locomotive Engines.**

ORDERS executed promptly to any extent for their celebrated Wheels, either single or double plate, with or without axles.

WHEELS FITTED

To Hammered or Rolled Axles, in the best manner, at the shortest notice, and on the most reasonable terms.

---

## AMERICAN BANK NOTE COMPANY.

*Bank Note Engravers & Printers.*

Also engraved in a style corresponding in excellence with that of Bank Notes,

*Railroad, State and County Bonds, Bills of Exchange, Checks, Drafts, Certificates of Stock and Deposits, Promissory Notes, Bills and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, Etc., Etc.*

Constantly on hand, Bank Note Paper, made to order, of superior quality.

The above office is under the supervision of

GEORGE T. JONES

*S. E. Cor. Fourth and Main Sts.*

---

MANUFACTURERS, IMPORTERS & DEALERS

—IN—

**Railroad, Car and Machine Shop**

## SUPPLIES,

—AND—

MACHINERY OF EVERY DESCRIPTION.

**47 West Front St., Cincinnati.**

PERKINS, LIVINGSTON & POST.

---

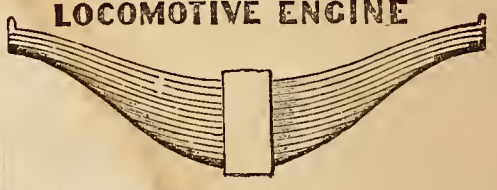
## RAILWAY SPRINGS.

**FREIGHT**






**LOCOMOTIVE ENGINE**



THE SUBSCRIBER OFFERS TO RAILROAD SUPERINTENDENTS, LOCOMOTIVE AND CAR BUILDERS, a Superior Quality of

**ELLIPTIC AND SEMI-ELLIPTIC**

## SPRINGS.

Made at his Shops in Philadelphia. Employing only the most experienced workmen and BEST MATERIAL, he pledges himself to furnish a Spring of the greatest elasticity, and one which shall be uniformly reliable in its carrying weight.

**All Springs tested to double their usual load.**

**PHILIP S. JUSTICE,**

No. 14, N. 5th St. Phil. No. 42 Cliff St. N. Y.

Shops—Seventeenth and Coates St. PHIL.

---

## Railroad Iron.

The undersigned, agents of the manufacturers, are prepared to contract to deliver the best quality AMERICAN AND WELSH RAILS, of any required weight or pattern. Also *Steel Rails, Steel Tyres, Steel Boiler Plates, Axles, Crossings and Frogs.*

PERKINS LIVINGSTON & POST,

**No. 47 West Front St., CINCINNATI.**

PERKINS & LIVINGSTON,

54 Exchange Place, New York.

---

## W. M. F. HEWSON,

## STOCK BROKER,

21 WEST THIRD STREET, CINCINNATI.

Buys and sells Stock, Bonds and other Securities on commission only; negotiates Loans and takes Bills

## Baltimore and Ohio Railroad

This great national thoroughfare is again open for

**Freight and Travel.**

The Cars and Machinery destroyed are being replaced by nerw unning stock, with all recent improvements; and a

*Bridges & Track are again in Substantial Condition*

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of ts business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the *recent Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

**CONNECTIONS**

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Wash ington Branch for Washingtnn City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Balti more on the Northern Cities give the *privilege of visiting* WASHINGTON CITY *en route*—being $3,00 *lower than the cost by any other line*, as recently charged; and the rate to Baltimore being $1,50 *lower than recently charged by way of Harrisburg.*

This is the ONLY ROUTE by which passengers can procure *through tickets and through checks to* WASHINGTON CITY.

W. P. SMITH. *Master Transportation, Baltimore*
J H. SULLIVAN, *Gen. Wes. Ag't, Bellaire, O.*
L M COLE, *Gen. Ticket Agent, Baltimore.*

## Little Miami and Columbus & Xenia Railroads.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Cincinnati Express | 6 00 A. M. | 6 30 P. M. |
| Mail and Express | 9 00 A. M. | 4 30 A. M. |
| Columbus Accommodation | 4 00 P. M. | 11 45 A. M. |
| Morrow Accommodation | 5 20 P. M. | 7 45 A. M. |
| Eastern Night Express | 10 00 P. M. | 7 50 A. M |

☞Sle ping Cars by Night Express Train.

The Eastern Night Express leaves Sunday night, in place of Saturday night.

## Cincinnati, Hamilton & Dayton Railroad.

Trains run as follows, Sundays excepted:

| | DEPART. | ARRIVE. |
|---|---|---|
| Indianapol's & Cambridge City | 6 00 A. M. | 10 05 P. M. |
| Toledo & Detroit | 7 00 A. M. | 9 45 P. M |
| Dayton & Sandusky Mail | 7 00 A. M. | 5 50 P. M |
| Richmond & Chicago | 7 00 A. M. | 9 25 P. M. |
| Mail and Express | 9 40 A. M. | 6 30 P. M. |
| Dayton Accommodation | 2 10 P. M. | 9 25 P. M. |
| Indionapolis & Cambridge City | 4 00 P. M. | 12 25 P. M. |
| Toledo, Detroit, & Huntsville | 5 00 P. M. | 12 50 P. M. |
| Hamilton Accommodation | 7 00 P. M. | 6 45 A. M. |
| Richmond & Chicago | 6 00 P. M. | 7 55 A. M. |
| Eastern Night Express | 10 40 P. M. | 7 30 A. M. |
| Hamilton Accommodation | | 7 55 A. M. |

Sleeping Cars on the 5 00 P. M. train for Toledo and Detroit. Also on the 6 00 P. M. train for Chicago. Also on the 10 50 P. M. train for the East.

The 10 00 P. M. leaves Sunday, but not Saturdays.

Trains run SEVEN MINUTES FASTER than Cincinnati time.

For all information and through tickets, please apply at the old office, south-east corner of Broadway and Front; Burnet House Office, corner Vine and Baker streets, and at the respective depots. East Front and West Sixth streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

## Change of Time.

SUNDAY, JUNE 19, 1865.

**Cincinnati to St. Louis without Change of Cars.**

## OHIO & MISSISSIPPI R. R.

**Three Trains Daily,**

Except Saturdays and Sundays.

*For Louisville, Evansville, St. Louis, Cairo, St. Joseph Jefferson City and all Western Cities.*

TRAINS RUN AS FOLLOWS (SATURDAYS AND Sundays excepted):

| Louisville, St, Louis and Cairo | Depart. | Arrive. |
|---|---|---|
| Mail | 7:20 A. M | 8:00 A. M. |
| St. Louis, Cairo, & Louisville | 7,50 P. M. | 11:00 P. M. |
| Louisville, Special Train | 3:45 P. M. | 1:50 P. M. |

One train, on Sundays, through to St. Louis and Cairo at 7:50 P. M.

Sunday evening train, at 8 o'clock, connects for Louisville, via Mitchell and New Albany.

☞Trains of the Ohio & Mississippi Railroad run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets, please apply at the Ticket Office, No. 82 Fourth Street, adjoining the Gazete Office: No. 12 Broadway, Railroad House Building, and at the Depot of the Ohio & Mississippi Railroad, foot of Mill street. C. E. FOLLET, General Ticket Agent.

W. D. GALSWOLD, General Sup't.

## CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



## RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place unites with Railroads for and from all points in the West and North-west.

## SUMMER ARRANGEMENTS.

**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:50 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train eaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A.M.—Indianapolis. Lafayette, Springfield. Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—3:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD. President
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

## MOSELEY'S WROUGHT IRON ARCH

## BRIDGES,

AND

## CORRUGATED IRON ROOFS

ARCHED AND FLAT.



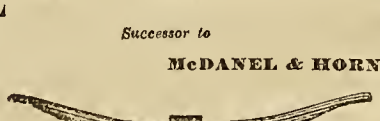
CORRUGATED SHEETS, OF ALL SIZES, CONstantly on hand, painted, and ready for shipment, with instructions for applying them.

MOSELEY & CO.
Boston, Mass.

## EDWIN J. HORNER,

*Successor to*

**McDANEL & HORNER,**



*Locomotive and Railroad*

## CAR SPRING MANUFACTURER,

**Wilmington, Delaware.**

## FREEDOM IRON COMPANY,

MANUFACTUTERS OF

**LOCOMOTIVE TYRE,**

**Engine and Car Axles, Pump and Piston Rods**

**Bar of all Sizes,**

And all Forgings for Railroad Machinery.

## Lewistown, Mifflin Co., Penn

**JOHN A. WRIGHT, Sup't.**

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works June9

## THE SCHENECTADY LOCOMOTIVE WORKS,

**SCHENECTADY, N. Y.,**

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING**

**LOCOMOTIVE ENGINES**

AND OTHER

**Railroad Machinery, Tires, etc.**

—AND ALSO TO—

## Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country without delay.

**JOHN ELLIS, President.**
**WALTER McQUEEN, Sup't.**

## PASCAL IRON WORKS.

ESTABLISHED 1821.

## MORRIS TASKER & CO

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler Flues**—from 1¼ to 10 inches outside diameter, cut to definite lengths.

**Wrought Iron Welded Tubes**—from ⅛ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

**Wrought Iron Galvanized Tubes**—strong and durable, designed especially for Water purposes.

**Cast Iron Gas or Water Pipe**—1¼ to 24 inches in diameter, and branches for same, &c.,

**Gas Works Castings, etc., etc.**

**PHILADELPHIA.**

STEPHEN MORRIS, CHAS. WHEELER
THOS. T. TASKER, JR., S. P. M. TASKER
HY. G. MORRIS.

## Philadelphia, Wilm'gton & Baltimore RAILROAD!!



## FOUR PASSENGER TRAINS DAILY

**TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY**

4.30 (Express Monday excepted). 8.05 A. M.; 12. A. M (Express); 2.30 P M.; 11 30 P M night.

On Sundays, 4.30 A M.; 11.30 P M.

Leave Baltimore for North and West, 8.35 A. M.; 9.55 A. M. (Express); 1.35 P. M. (Express); 7.10 P. M.; 10.24 P. M (Express.

On Sundays, 10.24 P M.

☞Through connections made for all points East and West.

SMITHSONIAN INSTITUTION LIBRARIES
3 9088 01549 3083